

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

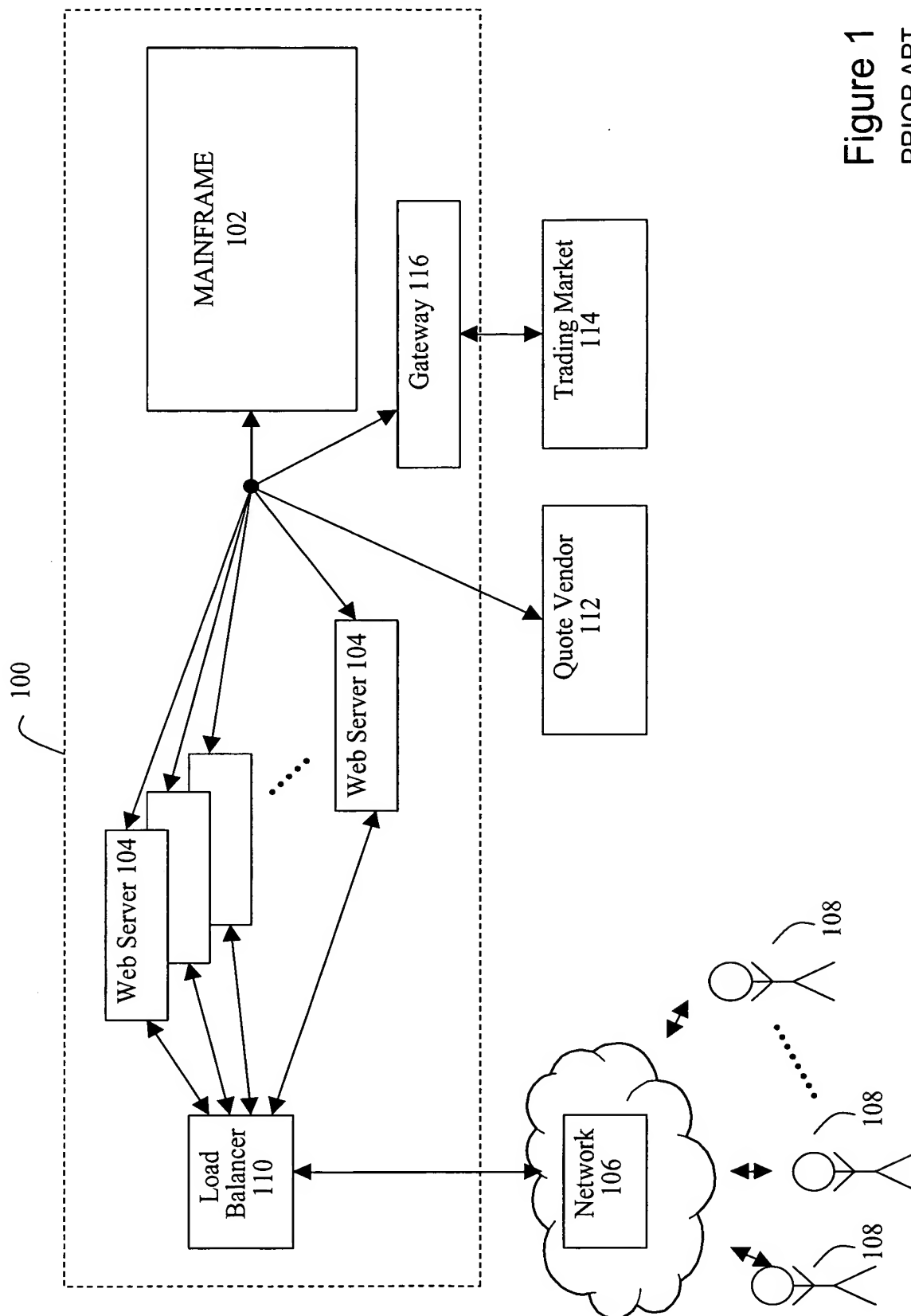
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



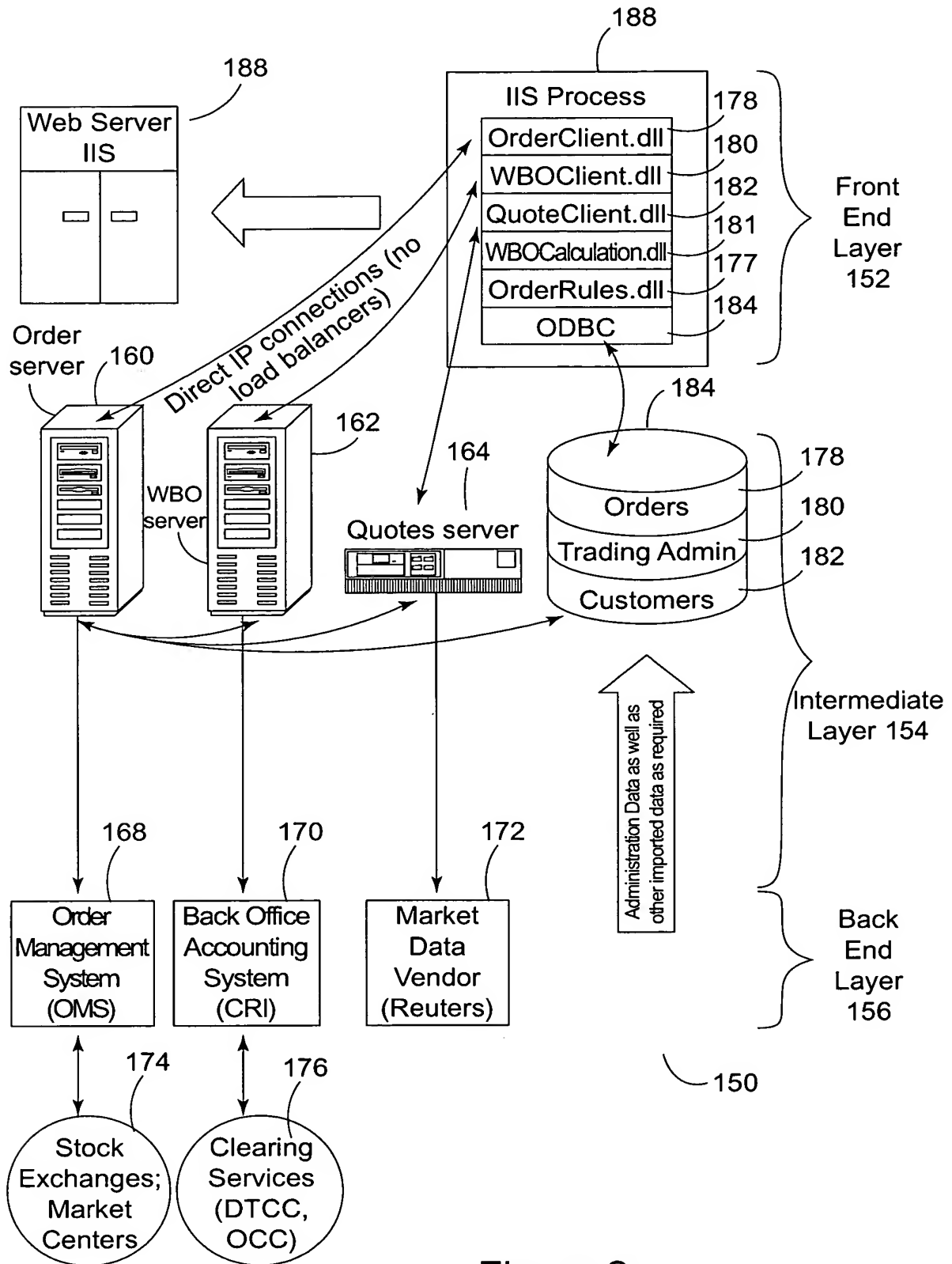


Figure 2

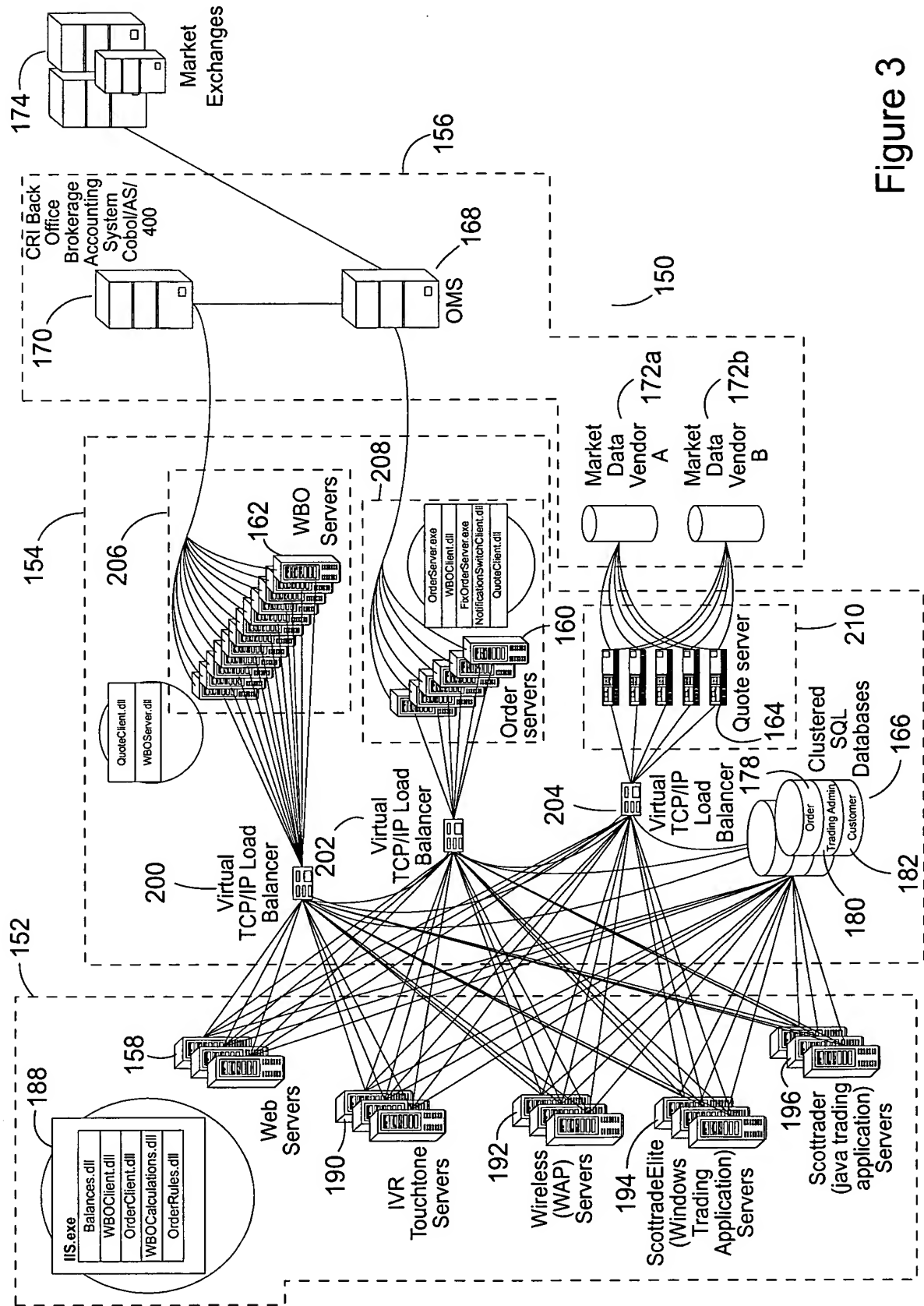


Figure 3

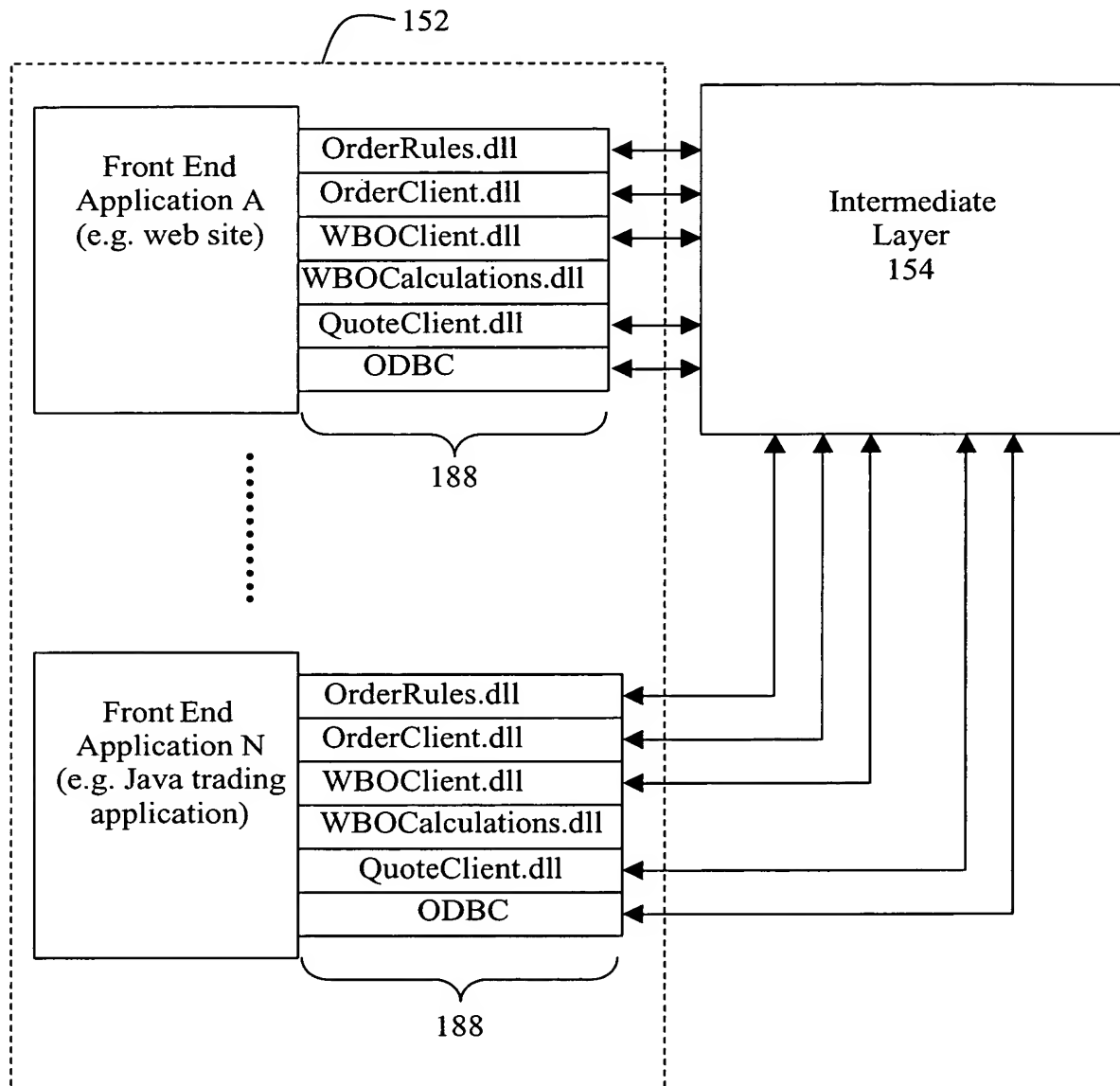


Figure 4

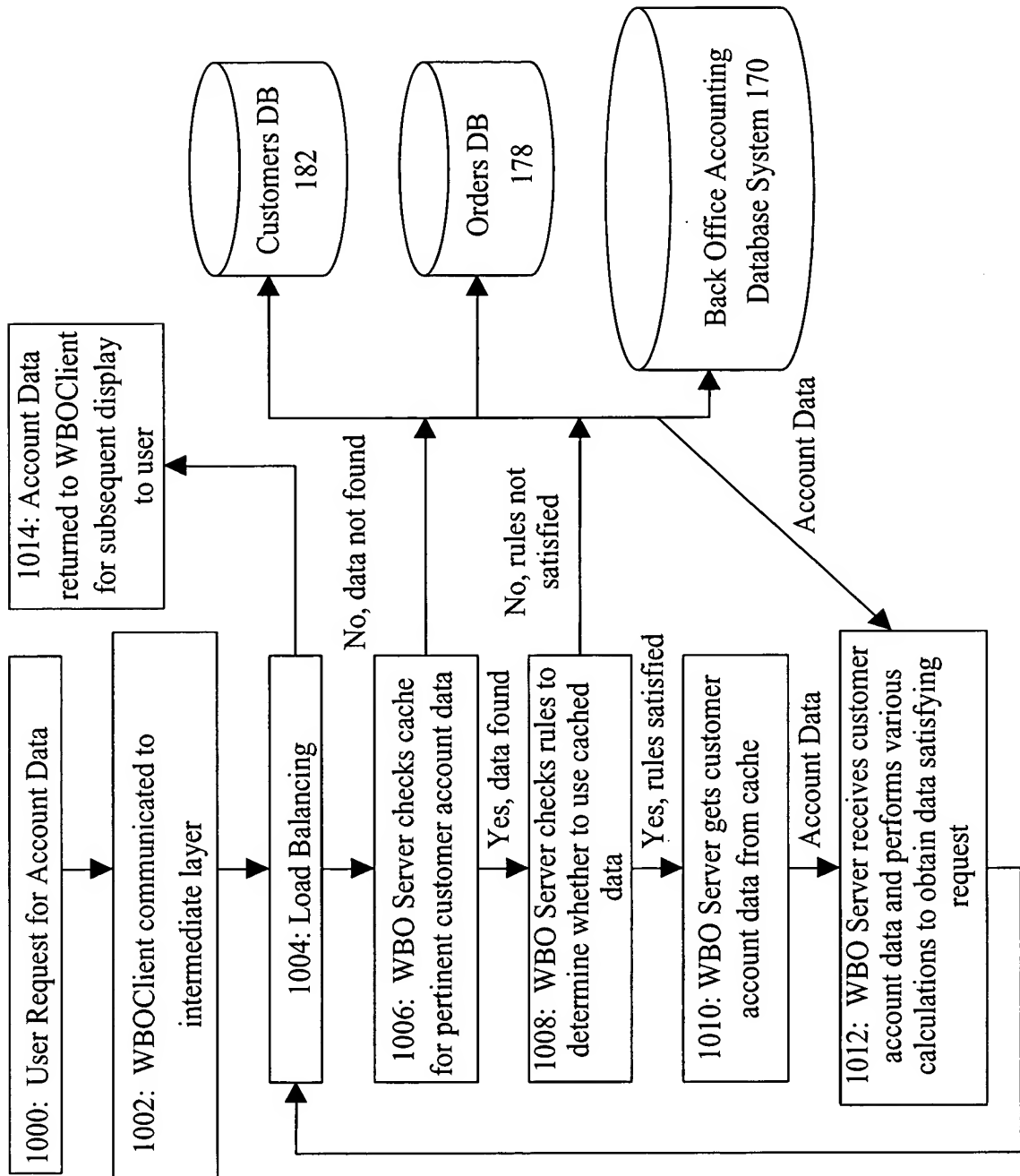


Figure 5

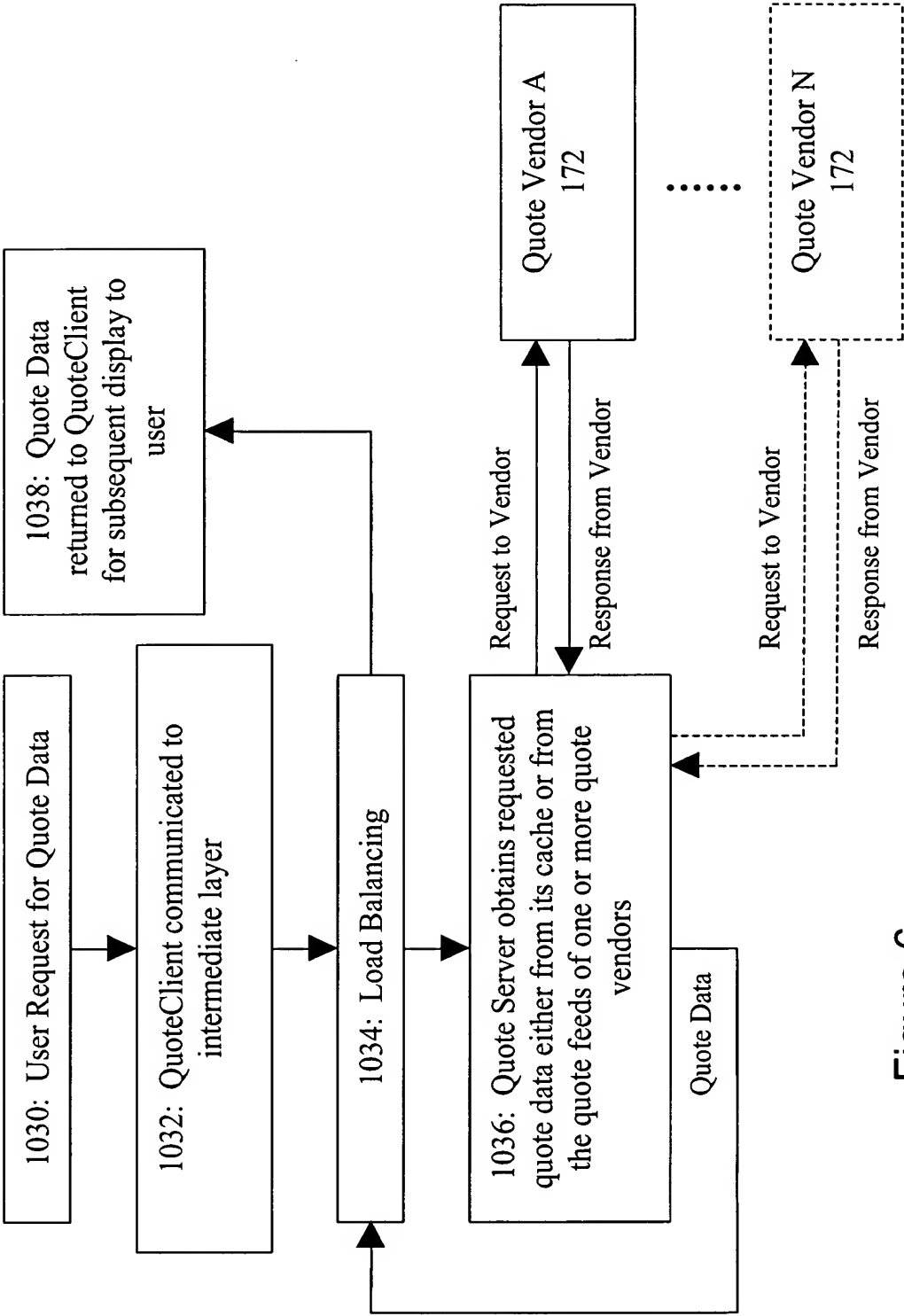


Figure 6






		<p>Account # 123xyz</p> <p> <input type="checkbox"/> First Step  <input type="checkbox"/> Deposit Funds  <input type="checkbox"/> echeck  <input type="checkbox"/> Wireless         </p>		<p> <input type="checkbox"/> New Corporate Offerings  <input type="checkbox"/> Tutorial - Features of Scottrade  <input type="checkbox"/> Introducing Scottrade Elite  <input type="checkbox"/> NEW Scottrade Elite         </p>		<p> <input type="checkbox"/> Scottrade  <input type="checkbox"/> Streaming Quotes  <input type="checkbox"/> Market Indices  <input type="checkbox"/> Top Ten  <input type="checkbox"/> Briefing.com  <input type="checkbox"/> Change Accounts  <input type="checkbox"/> Logout of Trading  <input type="checkbox"/> Site Map         </p>																																				
<p>Home</p>	<p>Trading</p>	<p>Account Information</p>	<p>Quotes</p>	<p>Dow Jones News</p>	<p>Research</p>	<p>Customer Service</p>	<p>Help</p>	<p>Log Out</p>																																		
<p>Welcome to Scottrade Financial Services</p> <p><input checked="" type="checkbox"/> New Messages Today</p>																																										
<p>Real-Time Market Indices - October 13, 2003 4:17 PM EST</p> <p>U.S. Markets Closed</p> <table border="1"> <tr> <td>S&amp;P 500</td> <td>DJIA</td> <td>NASDAQ</td> </tr> <tr> <td>1045.35 +7.29</td> <td>9764.38 +89.70</td> <td>1933.50 +18.20</td> </tr> </table>									S&P 500	DJIA	NASDAQ	1045.35 +7.29	9764.38 +89.70	1933.50 +18.20																												
S&P 500	DJIA	NASDAQ																																								
1045.35 +7.29	9764.38 +89.70	1933.50 +18.20																																								
<p>Today's Real-Time Executions</p> <p>None</p>			<p>Current Open Orders</p> <p>None</p>			<p>Real-Time Account Information</p> <table border="1"> <tr> <td>Portfolio Value as of Previous Close</td> <td>\$ 163.08</td> <td>Help</td> </tr> <tr> <td>Current Net Balance (Cash + Unsettled Funds)</td> <td>\$ 304.82</td> <td>Help</td> </tr> <tr> <td>Total Account Value</td> <td>\$467.90</td> <td>Help</td> </tr> </table>			Portfolio Value as of Previous Close	\$ 163.08	Help	Current Net Balance (Cash + Unsettled Funds)	\$ 304.82	Help	Total Account Value	\$467.90	Help																									
Portfolio Value as of Previous Close	\$ 163.08	Help																																								
Current Net Balance (Cash + Unsettled Funds)	\$ 304.82	Help																																								
Total Account Value	\$467.90	Help																																								
<p>Trading Cash</p> <table border="1"> <tr> <td>Cash / Settled Funds</td> <td>\$ 304.82</td> <td>Help</td> </tr> <tr> <td>Unsettled Funds</td> <td>\$ 0.00</td> <td>Help</td> </tr> <tr> <td>Current Net Balance</td> <td>\$ 304.82</td> <td>Help</td> </tr> <tr> <td>Trading Cash</td> <td>\$304.82</td> <td>Help</td> </tr> </table> <p>*This account is not Restricted</p>			Cash / Settled Funds	\$ 304.82	Help	Unsettled Funds	\$ 0.00	Help	Current Net Balance	\$ 304.82	Help	Trading Cash	\$304.82	Help	<p>Real-Time Positions</p> <table border="1"> <tr> <th>Symbol</th> <th>Qty</th> <th>Acct Type</th> <th>Quote</th> <th>Value</th> </tr> <tr> <td>CSCO</td> <td>5</td> <td>CASH</td> <td>21.00</td> <td>105.00</td> </tr> <tr> <td>MSFT</td> <td>2</td> <td>CASH</td> <td>28.78</td> <td>57.56</td> </tr> <tr> <td>SVXS</td> <td>1</td> <td>CASH</td> <td>1.27</td> <td>1.27</td> </tr> <tr> <td colspan="4">Total Market Value</td> <td>\$163.83</td> </tr> </table>			Symbol	Qty	Acct Type	Quote	Value	CSCO	5	CASH	21.00	105.00	MSFT	2	CASH	28.78	57.56	SVXS	1	CASH	1.27	1.27	Total Market Value				\$163.83
Cash / Settled Funds	\$ 304.82	Help																																								
Unsettled Funds	\$ 0.00	Help																																								
Current Net Balance	\$ 304.82	Help																																								
Trading Cash	\$304.82	Help																																								
Symbol	Qty	Acct Type	Quote	Value																																						
CSCO	5	CASH	21.00	105.00																																						
MSFT	2	CASH	28.78	57.56																																						
SVXS	1	CASH	1.27	1.27																																						
Total Market Value				\$163.83																																						
<p>Symbol: <input type="text"/></p>		<p>Detailed Quote</p>		<p>Quick Links</p>																																						

Figure 8a

Home

Trading

Account Information

Quotes


Dow Jones News

Research

Customer Service

Help

Log Out



Account # 123xyz

☐ First Step

☐ Deposit Funds

☐ echeck

☐ Wireless

NEW FEATURES

☐ New Corporate Offerings

☐ Tutorial - Features of Scottrade

☐ Introducing Scottrade Elite

☐ NEW ScottradeElite

CURRENT MARKETS

☐ Scottrade

☐ Streaming Quotes

☐ Market Indices

☐ Top Ten

☐ Briefing.com

☐ Change Accounts

☐ Logout of Trading

☐ Site Map

Current Trade Balances

October 13, 2003

Description	Value	Help
Portfolio Value as of Previous Close	\$163.08	<a href="#">Help</a>
Current Net Balance	\$304.82	<a href="#">Help</a>
Total Account Value	\$467.90	<a href="#">Help</a>

Cash / Settled Funds

\$304.82

[Help](#)

Today's Settled Funds

\$304.82

[Help](#)

\*\*\*Unsettled Stock Sells

\$0.00

[Help](#)

\*\*\*Unsettled Option Sells

\$0.00

[Help](#)

\*\*\*Unsettled Other Sells

\$0.00

[Help](#)

\*\*\*Unsettled Total Sells

\$0.00

[Help](#)

Unsettled Total Buys

\$0.00

[Help](#)

Current Net Balance

\$304.82

[Help](#)

Trading Cash

\$15.00

[Help](#)

\*\*\*Trading Cash

\$289.82

[Help](#)

\*\*\*Trading Cash for Fixed Income/Mutual Funds Purchases

\$289.82

[Help](#)

\*\*\* Click the Helps for information on how you are able to use these funds for Buys.

Today's Trades - You can see settlement dates for your trades today by clicking on Today's Real-Time Executions found on your Home page.

Previous Trades - You can see settlement dates for past trades by going to Account Information and then to your Trade History.

Symbol:

Detailed Quote

[Quick Links](#)

Figure 8b

Home

Trading

Account Information

Quotes

Dow Jones News

Research

Customer Service

Help

Log Out

Account # 123xyz

☐ First Step

☐ Deposit Funds

☐ echeck

☐ Wireless

NEW FEATURES

☐ New Corporate Offerings

☐ Tutorial - Features of Scottrade

☐ Introducing Scottrade Elite

☐ NEW ScottradeElite

CURRENT MARKETS

☐ Scottrade

☐ Streaming Quotes

☐ Market Indices

☐ Top Ten

☐ Briefing.com

☐ Change Accounts

☐ Logout of Trading

☐ Site Map

Current Open Orders & Real-Time Executions

Current Open Orders

MOD	CXL	Action	Qty	Symbol	Price	Acct Type	T.I.F.	Qualifiers	Order	Status	Session
MOD	CXL	SELL	2	MSFT	Limit 40.00	CASH	DAY	None	XIA242520031013	QUEUED	Regular
MOD	CXL	SELL	1	RTRSY	Limit 15.00	CASH	DAY	None	XAB736120031013	QUEUED	Regular

Help

Today's Real-Time Executions

None

Help

©Copyright 2000 Scottrade. All Rights Reserved.

Symbol:

Detailed Quote

Quick Links

Figure 8c

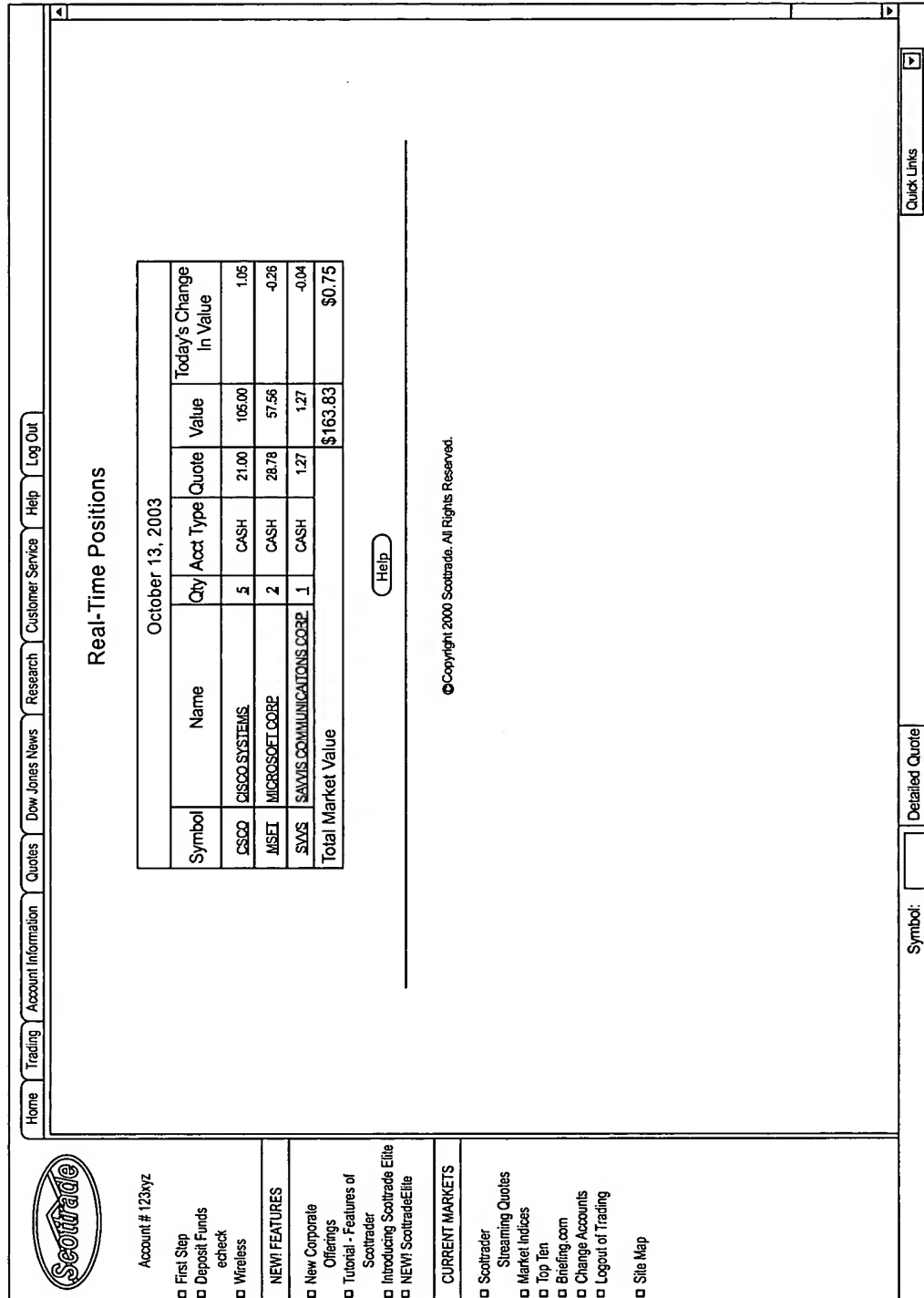


Figure 8d

Home

Trading

Account Information

Quotes

Dow Jones News

Research

Customer Service

Help

Log Out

Scottrade

Account # 123xyz

☐ First Step

☐ Deposit Funds

☐ echeck

☐ Wireless

NEW FEATURES

☐ New Corporate Offerings

☐ Tutorial - Features of Scottrade

☐ Introducing Scottrade Elite

☐ NEW ScottradeElite

CURRENT MARKETS

☐ Scottrade

☐ Streaming Quotes

☐ Market Indices

☐ Top Ten

☐ Briefing.com

☐ Change Accounts

☐ Logout of Trading

☐ Site Map

Equity Order Entry

Market Side:

Buy

Help

Quantity:

1

Help

Symbol:

GE

Help

Order Type:

Market

Help

Limit Price:

Help

Stop Price:

Help

Time in Force:

Day Order

Help

Qualifiers:

☐ All or None

Help

Trading Period:

Regular Hours

Help

Get Quote

Confirm

Abandon

© Copyright 2000 Scottrade. All Rights Reserved.

Symbol

Detailed Quote

Quick Links


Figure 8e

13 / 62

## Figure 8f

Title: System And Method For The Automated Brokerage  
Of Financial Instruments  
Inventor(s): Tully et al.  
Appl. No. 10/692,067  
Docket # 36194/42366

14 / 62

		<p>Account # 123xyz</p> <ul style="list-style-type: none"><li><input type="checkbox"/> First Step</li><li><input type="checkbox"/> Deposit Funds</li><li><input type="checkbox"/> echeck</li><li><input type="checkbox"/> Wireless</li></ul>	
<p>NEW FEATURES</p> <ul style="list-style-type: none"><li><input type="checkbox"/> New Corporate Offerings</li><li><input type="checkbox"/> Tutorial - Features of Scottrade</li><li><input type="checkbox"/> Introducing Scottrade Elite</li><li><input type="checkbox"/> NEW ScottradeElite</li></ul>		<p>CURRENT MARKETS</p> <ul style="list-style-type: none"><li><input type="checkbox"/> Scottrade</li><li><input type="checkbox"/> Streaming Quotes</li><li><input type="checkbox"/> Market Indices</li><li><input type="checkbox"/> Top Ten</li><li><input type="checkbox"/> Briefing.com</li><li><input type="checkbox"/> Change Accounts</li><li><input type="checkbox"/> Logout of Trading</li><li><input type="checkbox"/> Site Map</li></ul>	
<p>Home</p>		<p>Trading</p>	
<p>Account Information</p>		<p>Quotes</p>	
<p>Dow Jones News</p>		<p>Research</p>	
<p>Customer Service</p>		<p>Help</p>	
<p>Log Out</p>			

Your order has been entered subject to broker approval.

Market Side:	Buy
Quantity:	1
Symbol:	GE
Price	At the Market
Time In Force:	Day Order
Estimated Commission:	\$7.00
Account Number:	123xyz
Account Type:	CASH

Your reference number is: XXB328920031013

Any order entered after market close is good for the next business day.

©Copyright 2000 Scottrade. All Rights Reserved.

Symbol:

Detailed Quote

Quick Links

Figure 8g

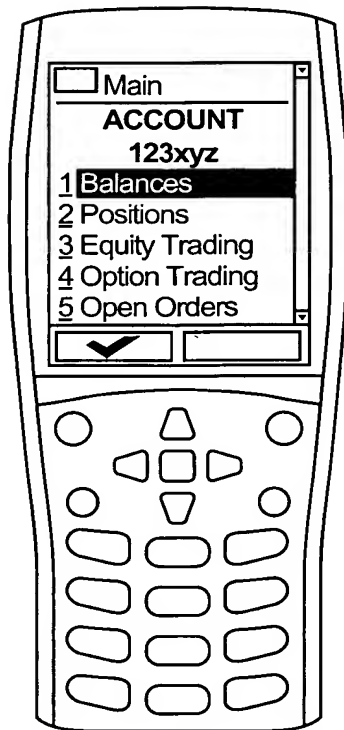


Figure 9(a)

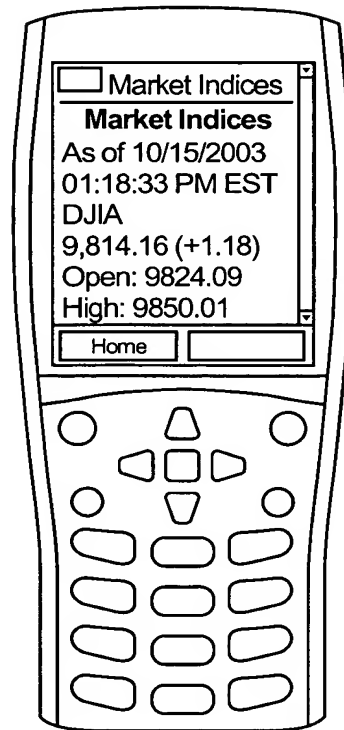


Figure 9(b)

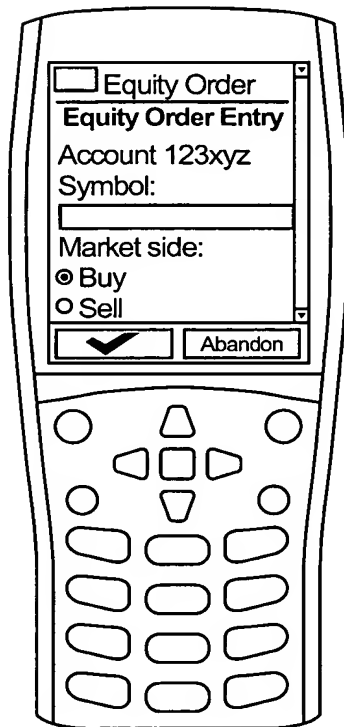


Figure 9(c)

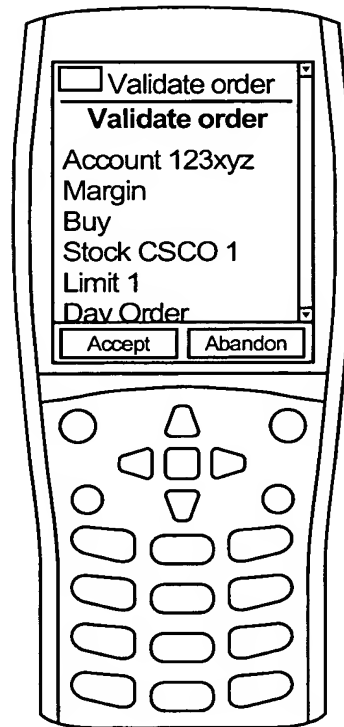


Figure 9(d)





Figure 9(e)

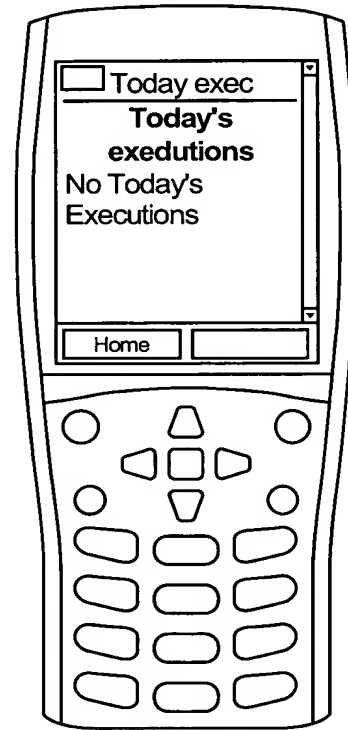


Figure 9(f)

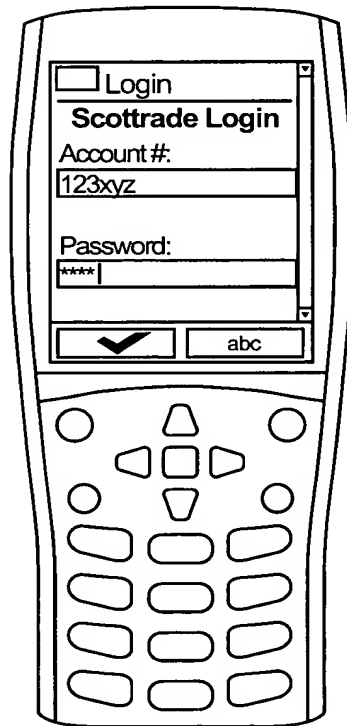


Figure 9(g)

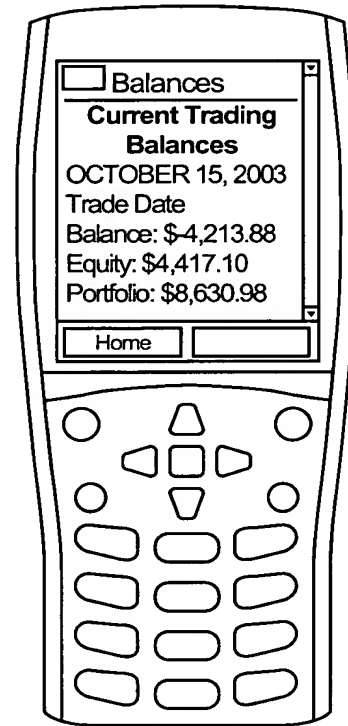


Figure 9(h)

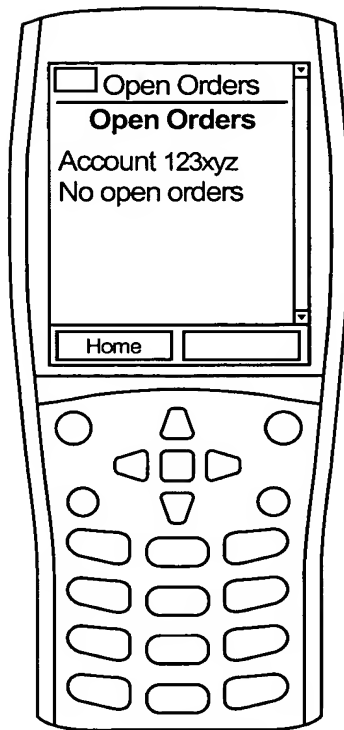


Figure 9(i)

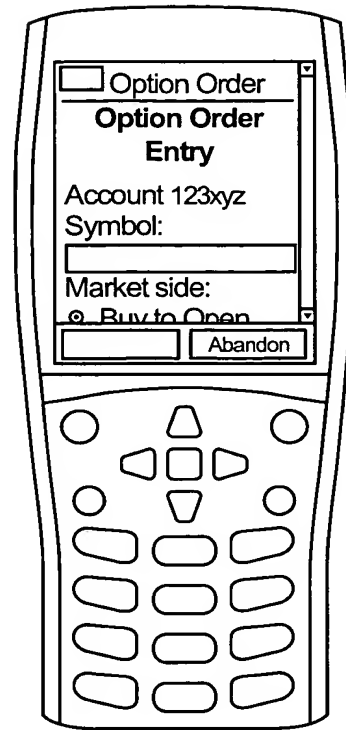


Figure 9(j)

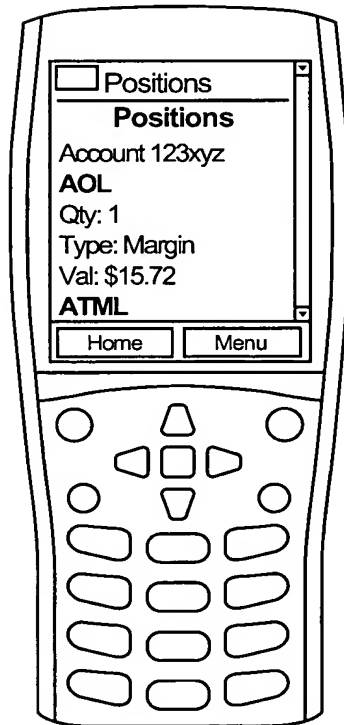


Figure 9(k)

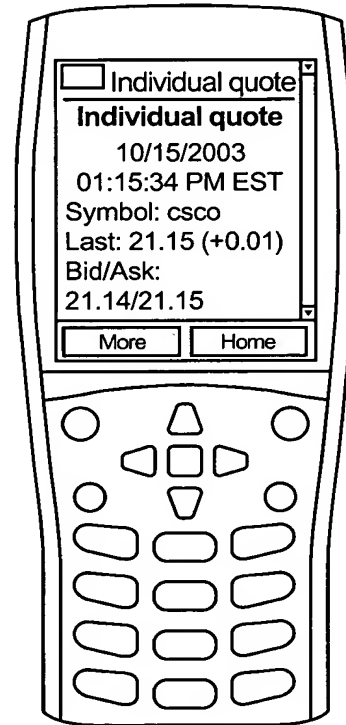


Figure 9(l)

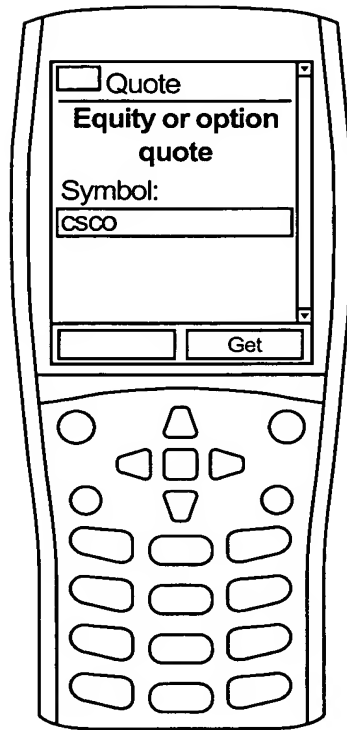


Figure 9(m)

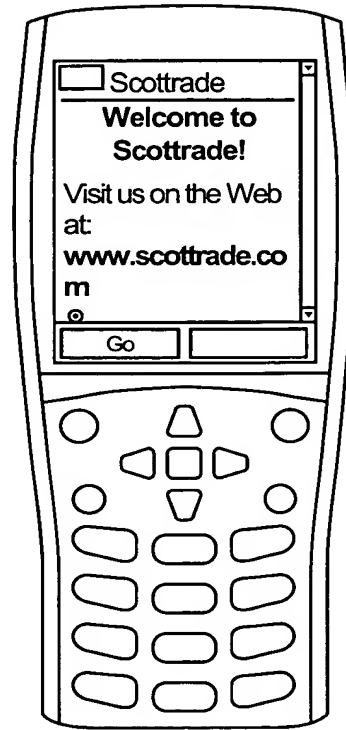


Figure 9(n)

ScottradeELITE v1.0 - Build 56: Email issues/questions or suggestions to eliteSupport@Scottrade.com

Wizards System Market Data Trading Windows Help

Layout Mgr ▾ Help Quotes ▾ Chart ▾ Level II ▾ Full Quote ▾ Time&Sales ▾ News ▾ Option Chain ▾ Top Performers ▾ High&Lows

Order Entry ▾ Trading Log ▾ Balances ▾ Positions ▾ Executions ▾ Open Orders ▾ Market Research ▾ Symbol Lookup ▾ Alerts

Order Entry

Symbol: RTRSY Quantity: 1 Limit Price: 15 Stop Price: 15 Order Type: Limit Order ID: 123xyz Duration: Day Account: 123xyz

Buy Buy to Cover Sell Sell Short Quick Cancel Last: 24.46 Bid: 21.85 Ask: 24.45 Buying Power 289.82

Order confirmed: #XAB736120031013

Open Orders for 123xyz[2]

Cxl Order Cxl Same Symbols Cxl All Orders Mod

Symbol	Action	Quantity	Limit...	Stop...	Tif	Status	RefNumber
MSFT	Sell	2	40.00	0.00	Day	Sent	XIA2425200310...
RTRSY	Buy	1	15.00	0.00	Day	Sent	XAB736120031...

FullQuote: \$DJIB - DJ Industrial Average

Go	Linker	Templates	Settings
\$DJIB	89.70	n/a	
Bid	Ask	Last	High
0.00	0.00	9764.3	9783.4
		9675.5	1662233

FullQuote: \$COMPQ - NASDAQ COMPOSITE

Go	Linker	Templates	Settings
\$COMPQ	18.20	n/a	
Bid	Ask	Last	High
0.00	0.00	1933.5	1941.0
		1922.0	0

FullQuote: \$SPXC - S&P 500 INDEX

Go	Linker	Templates	Settings
\$SPXC	7.29	n/a	
Bid	Ask	Last	High
1044.90	1045.52	1045.3	1048.9
		1038.0	0

Account balances

123xyz	Settings
Portfolio Value as of Previous Close	163.08
Current Net Balance	304.82
Total Account Value	467.90
Unsettled Sale Proceeds	0.00
Trading Cash	289.82

Positions for 123xyz[3]

123xyz	Settings						
Symbol	Quan...	AvgP...	Last	\$Cha...	\$Chg...	\$ P&L	%P&L
CSCO	5	9.0000	21.00	12.0000	12.0000	60.00	133.33
MSFT	2	45.0000	28.78	-0.18	-16.22	-32.44	-36.04
SWWS	1	0.0000	1.27	-0.04	0.0000	0.00	0.00

Unrealized P&L \$: 27.56  
Market value \$: 163.83

Elite Sample Active Trader Layout Elite Sample Basic Market View Layout Elite Sample Full Quotes Layout Elite Sample Layout #1 Elite Sample Layout #2 Elite Sample Layout #3 Elite Sample Linker [4] >

Acc: 123xyz OpenPros: 3 OpenOrders: 2 BP: \$289.82 CommLink: 0.03 KB/s 17:12:24 EST

Figure 10

Scotttrader v3.1 Email support: scotttrader@scotttrade.com

Account [123xyz] Symbols [9/20] QuickQuotes [0/5] Top Ten [0]

Help

Market Summary 17:44:45  
\$DJI 9764.38 +88.70  
\$COMP 1933.5 +18.20  
\$SPX 1045.35 +7.29

QuickQuote  
Settings  
Save Layout

Order Entry

MarketMovers

Chart

Top Ten

Stock Lists

Shortcuts

NonMargin Cash: 260.88

Positions: 3

Open orders: 3

Refresh

Selected list: None

Market At Glance = ☐ = Stock Research = ☐ = Mutual Fund Research = ☐ = Research Tools = ☐ = Customer Service = ☐

Trading	Symbol	Last	\$Change	Bid	Ask	High	Low	Last Ticks	Volume	Data Source	Time	Prev Close	% Change
Buy Sell	MSFT	28.78	-13	28.77	28.77	29.10	28.50	+	39,329,997	Composite	16:03:00	28.91	-45%
Buy Sell	CSCO	21.00	+21	-20.97	20.99	21.09	20.86	-	36,970,298	Composite	17:44:38	20.79	+1.01%
Buy Sell	NITE	13.97	+53	-14.00	14.13	14.00	13.41	-	1,276,756	Composite	16:03:00	13.44	+3.94%
Buy Sell	SVVS	1.27	-04	+1.23	1.36	1.37	1.21	+	218,365	Composite	16:03:00	1.31	-3.05%
Buy Sell	HYPR	4.66	-11	+4.29	4.82	4.7	4.55	+	1,100	Composite	16:03:00	4.55	+2.42%
Buy Sell	IBM	93.20	+53	+93.10	93.25	93.54	92.58	+	4,639,200	Composite	16:03:00	92.67	+57%
Buy Sell	KO	44.14	+31	-44.11	44.58	44.25	43.82	-	3,420,200	Composite	16:02:00	43.83	+7.1%
Buy Sell	VMT	58.95	+53	-58.55	59.23	59.19	58.43	-	4,566,200	Composite	17:44:31	58.42	+91%
Buy Sell	EMC	14.45	-04	-14.43	14.45	14.66	14.30	-	11,818,600	Composite	16:01:00	14.49	-28%

Drag and drop a symbol over any icon or chart, QuickQuote or trading window and release for quicker access.

Warning: Applet Window

Current Real-Time Positions

Reload	Order Entry	Qty	Last Price	Change	Net Value	Executions	Balances	?
ActType	Symbol							
Cash	CSCO	15	21.00	21	105.00	Sell		
Cash	MSFT	2	28.78	-13	57.56	Sell		
Cash	SVVS	1	1.27	-04	1.27	Sell		

Warning: Applet Window

Current Real-Time Balances

Reload	Order Entry	Positions	Orders	Executions	Value	?	
Account Type	Symbol	Action	Qty	Limit	Stop	Tif	Status
Cash	GE	Buy	1	None	None	Day	Queued
Cash	RTRSY	Buy	1	15.0	None	Day	Queued
Cash	MSFT	Sell	2	40.0	None	Day	Queued

Warning: Applet Window

Today's Real-Time Executions

Reload	Order Entry	Positions	Orders	Balances	?
Symbol	Action	Quantity	\$Price	\$Total	AcctType

Figure 11

Trading (jdoe) Admin

☐ Indiv

☐ Group

Approval Queue

Symbol Admin

Option Admin

Trading control

History

Symbol Admin

Equity Symbol (Not Option):

Route	<input type="text" value="Normal"/> <input type="button" value="v"/>
Buy:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Sell:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Sell Short:	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="button" value="Inventory Check Required"/> <input type="button" value="v"/>
Buy to Cover:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Buy to Open:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Buy to Close:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Sell to Open:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Sell to Close:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Extended Hours Trading:	<input type="radio"/> Yes <input checked="" type="radio"/> No
Option Chain Allowed:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Min Lot Size:	<input type="text" value="1"/>
Margin Requirement:	<input type="text" value="50"/> %
Add Disallowed Option Root or Symbol:	<input type="text"/> <input type="button" value="Type"/> <input type="button" value="v"/>

Figure 12a

22 / 62

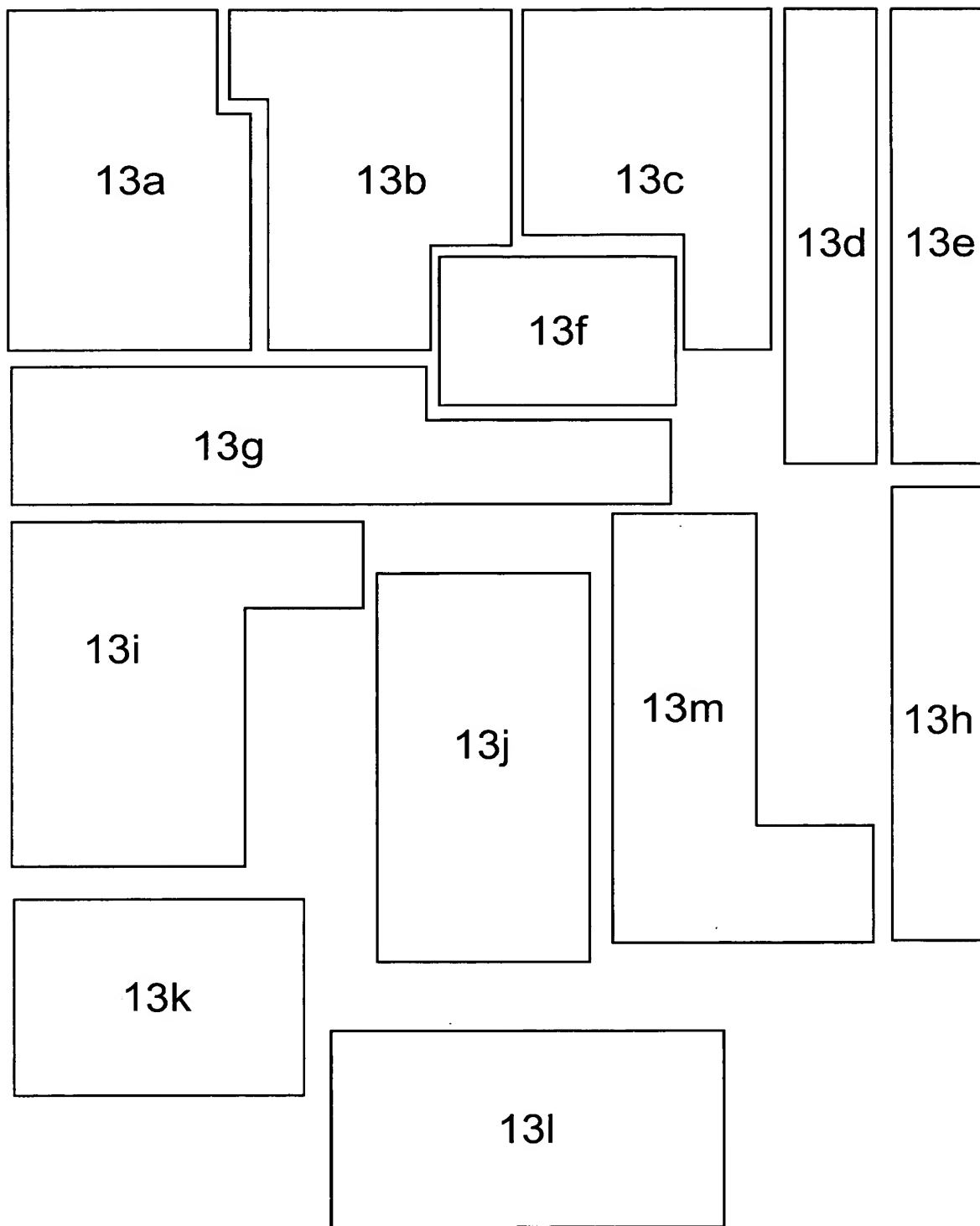
O Indiv	O Group	Approval Queue	Symbol Admin	Option Admin	Trading control	History
---------	---------	----------------	--------------	--------------	-----------------	---------

Disallowed Options			
#	Option Symbol	Option Symbol Type	Underlying Security
1	.AAM	Root	<u>Delete</u>
2	.AAY	Root	<u>Delete</u>
3	.AFU	Root	<u>Delete</u>
4	.AGK	Root	<u>Delete</u>
5	.AHY	Root	<u>Delete</u>
6	.AIE	Root	<u>Delete</u>
7	.AIX	Root	<u>Delete</u>
8	.AKA	Root	<u>Delete</u>
9	.ANO	Root	<u>Delete</u>
10	.AOP	Root	<u>Delete</u>
11	.AOV	Root	<u>Delete</u>
12	.AUB	Root	<u>Delete</u>
13	.AUE	Root	<u>Delete</u>
14	.AYP	Root	<u>Delete</u>

Figure 12b







Customers DB

Figure 13

tbl_day_trader_report	
account	varchar(12)
office_id	varchar(4)
Trades	int
Trade_begin_date	smalldatetime
Trade_end_date	smalldatetime
Report_date	smalldatetime
account_value	money
value_date	smalldatetime
Posted_date	smalldatetime

tbl_day_trader_log	
account	varchar(10)
updated	smalldatetime

fix	
account	char(8)
office_code	char(3)
password	varchar(10)
email	varchar(100)
ssn	char(9)
notification_method	tinyint
web_access	bit
web_trading	bit
sell_only	bit
invalid_email	bit
statements_online	bit
session_timeout	int
login_fails	int
last_access	datetime
proxy_delivery_status	tinyint
proxy_access_pin	varchar(4)
activation_date	smalldatetime
activated_by	varchar(6)
ivr_pin	varchar(4)
day_trader	bit
ivr_lockout	bit
last_updated	datetime
voice_callback	char(12)
agreement_status	char(4)

customers_without_password_ 20021111	
account	char(8)
office_code	char(3)
password	varchar(10)
email	varchar(100)
ssn	char(9)
notification_method	tinyint
web_access	bit
web_trading	bit
sell_only	bit
invalid_email	bit
statements_online	bit
session_timeout	int
login_fails	int
last_accaccess	datetime
proxy_delivery_status	tinyint
proxy_access_pin	varchar(4)
activation_date	smalldatetime
activated_by	varchar(6)
ivr_pin	varchar(4)
day_trader	bit
ivr_lockout	bit
last_updated	datetime
voice_callback	varchar(12)
agreement_status	char(4)
deactivation_datetime	datetime
deactivation_reason_id	smallint

Figure 13a

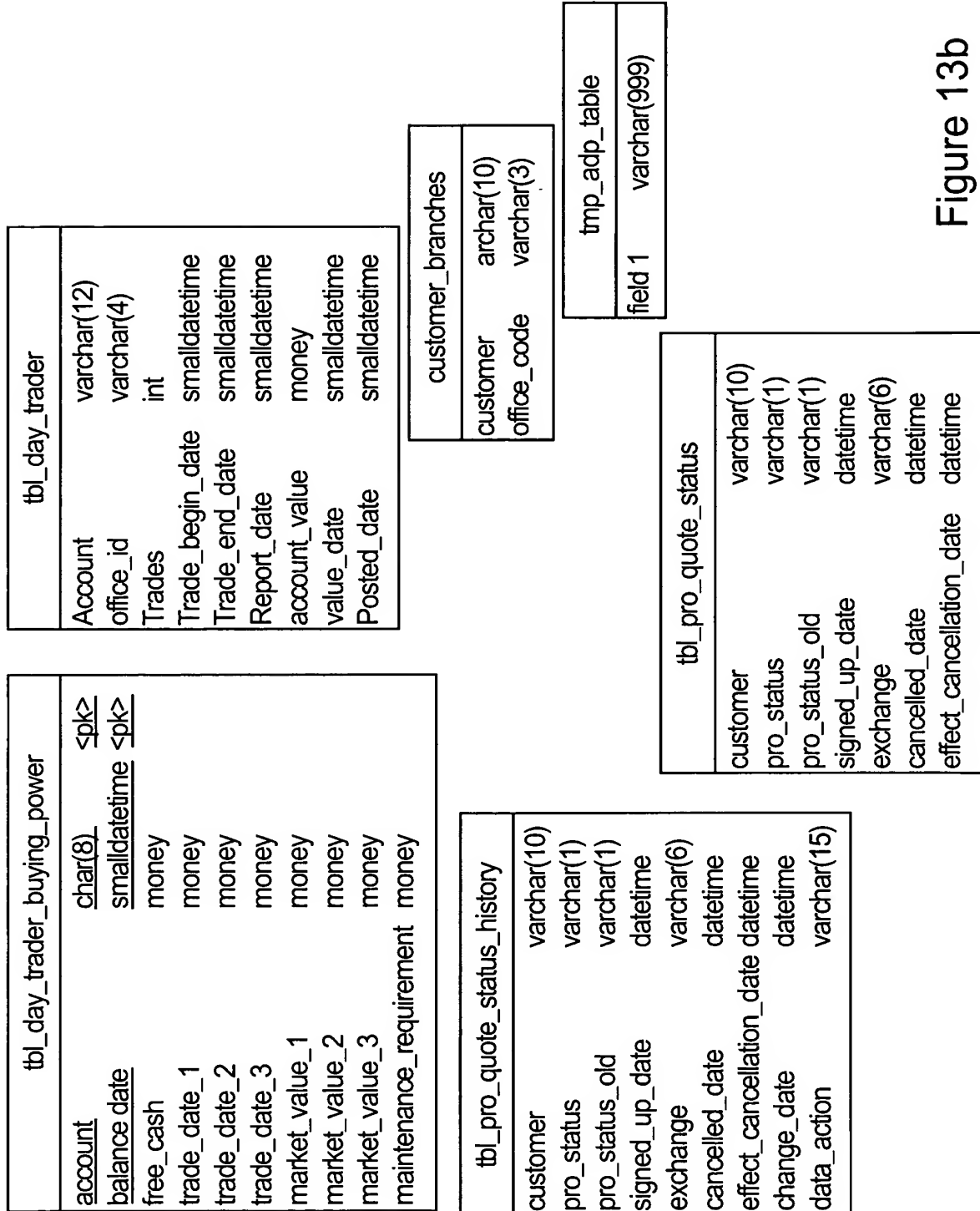


Figure 13b

tbl_user	tbl_proxy_status_change	tbl_customer636
<u>account parent</u> char(8) <pk> <u>account child</u> char(8) <pk> display_name varchar(25) last_modified_datetime datetime	account char(8) change_datetime datetime old_proxy_access_pin char(4) old_proxy_delivery_status tinyint new_proxy_access_pin char(4) new_proxy_delivery_status tinyint old_email varchar(100) new_email varchar(100)	account char(8) office_code char(3) password varchar(10) email varchar(100) ssn char(9) notification_method tinyint web_access bit web_trading bit sell_only bit invalid_email bit statements_online bit session_timeout int login_fails int last_access datetime proxy_delivery_status tinyint proxy_access_pin varchar(4) activation_date smalldatetime activated_by varchar(6) ivr_pin varchar(4) day_trader bit ivr_lockout bit last_updated datetime voice_callback char(12) agreement_status char(4)
bounced small varchar(150)	already_off account char(8)	
		tbl_customer_note
		customer_note_id int <pk> account char(8) note varchar(8000) note_created datetime note_last_updated datetime

Figure 13c

Title: System And Method For The Automated Brokerage  
Of Financial Instruments  
Inventor(s): Tully et al.  
Appl. No. 10/692,067  
Docket # 36194/42366

28 / 62

profiles_original	
customer	varchar(10)
broker	varchar(20)
first_name	varchar(50)
last_name	varchar(50)
address_1	varchar(40)
address_2	varchar(40)
city	varchar(30)
state	varchar(20)
zip	varchar(10)
pin	varchar(4)
voice_callback	varchar(20)
fax_callback	varchar(20)
notification_method	varchar(20)
quote_balance	decimal(10,2)
group_number	int
ivr_trading	bit
pc_trading	bit
web_trading	bit
margin_agreement	bit
option_agreement	bit
touched	datetime
office_code	varchar(10)
password	varchar(10)
customer_type	varchar(40)
email	varchar(100)
reg_rep	varchar(10)
option_purchase	int
option_covered	int
administrator	int
cancel_flag	int
short_name	varchar(40)
admin_level	int
allow_place_trades	int
ivr_time	int
ssn	varchar(9)
scheme_name	varchar(20)
web_group	int
expiration_minutes	int
invalid_email	bit
AMEX_agreement	bit
AMEX_agreement_version	varchar(10)
AMEX_agreement_date	smalldatetime
OPRA_agreement	bit
OPRA_agreement_version	varchar(10)
OPRA_agreement_date	smalldatetime
NYSE_agreement	bit
NYSE_agreement_version	varbinary(10)
NYSE_agreement_date	smalldatetime
cookies_time	smalldatetime
statements_online	bit
proxy_delivery_status	tinyint
proxy_access_pin	varchar(4)
day_trader	bit

Figure 13d

Title: System And Method For The Automated Brokerage  
Of Financial Instruments

Inventor(s): Tully et al.

Appl. No. 10/692,067

Docket # 36194/42366

29 / 62

profiles	
customer	varchar(10)
broker	varchar(20)
first_name	varchar(50)
last_name	varchar(50)
address_1	varchar(40)
address_2	varchar(40)
city	varchar(30)
state	varchar(20)
zip	varchar(10)
pin	varchar(4)
voice_callback	varchar(20)
fax_callback	varchar(20)
notification_method	varchar(20)
quote_balance	decimal(10,2)
group_number	int
ivr_trading	bit
pc_trading	bit
web_trading	bit
margin_agreement	bit
option_agreement	bit
touched	datetime
office_code	varchar(10)
password	varchar(10)
customer_type	varchar(40)
email	varchar(100)
reg_rep	varchar(10)
option_purchase	int
option_covered	int
administrator	int
cancel_flag	int
short_name	varchar(40)
admin_level	int
allow_place_trades	int
ivr_time	int
ssn	varchar(9)
scheme_name	varchar(20)
web_group	int
expiration_minutes	int
invalid_email	bit
AMEX_agreement	bit
AMEX_agreement_version	varchar(10)
AMEX_agreement_date	smalldatetime
OPRA_agreement	bit
OPRA_agreement_version	varchar(10)
OPRA_agreement_date	smalldatetime
NYSE_agreement	bit
NYSE_agreement_version	varchar(50)
NYSE_agreement_date	smalldatetime
cookies_time	smalldatetime
statements_online	bit
proxy_delivery_status	tinyint
proxy_access_pin	varchar(4)
day_trader	bit

Figure 13e

agreement_status_opra_audit	agreement_status_nyse_audit	agreement_status_nasdaq_audit
customer char(8)	customer char(8)	customer char(8)
agreement_id int	agreement_id int	agreement_id int
pro_status tinyint	pro_status tinyint	pro_status tinyint
signed tinyint	signed tinyint	signed tinyint
first_name varchar(50)	first_name varchar(50)	subscriber varchar(100)
last_name varchar(50)	last_name varchar(50)	signature varchar(101)
address1 varchar(50)	address1 varchar(50)	signature_date datetime
address2 varchar(50)	address2 varchar(50)	agent_name varchar(101)
city varchar(50)	city varchar(50)	title varchar(101)
state char(2)	state char(2)	title_other varchar(101)
zip varchar(10)	zip varchar(10)	change_datetime datetime
country varchar(50)	country varchar(50)	action_performed char(1)
birthdate datetime	change_datetime datetime	username varchar(40)
change_datetime datetime	action_performed char(1)	
action_performed char(1)	username varchar(40)	
username varchar(40)	amax_pro_status tinyint	

Figure 13f

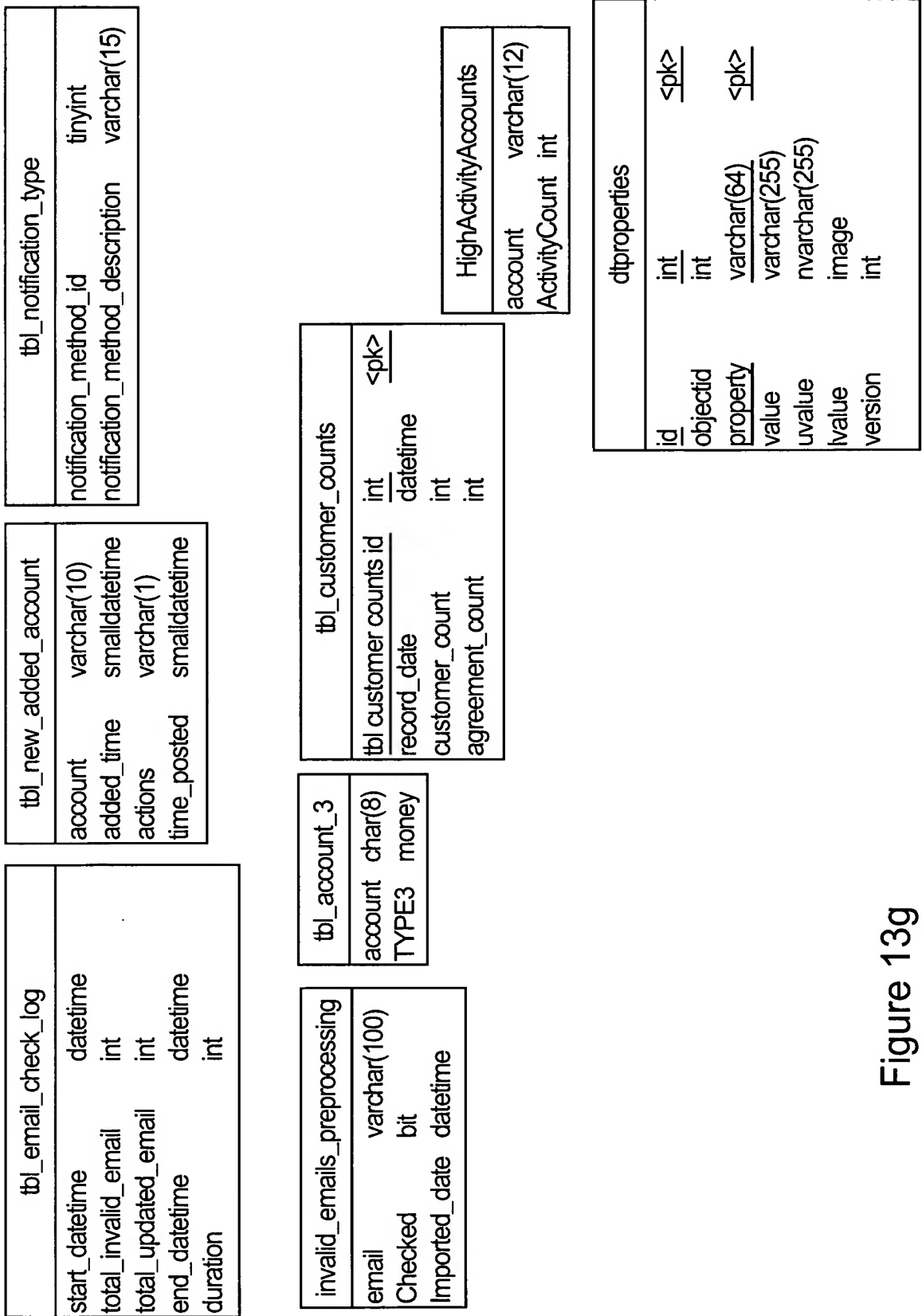


Figure 13g



Title: System And Method For The Automated Brokerage  
Of Financial Instruments  
Inventor(s): Tully et al.  
Appl. No. 10/692,067  
Docket # 36194/42366

32 / 62

profiles_backup_20021021_2000	
customer	varchar(10)
broker	varchar(20)
first_name	varchar(50)
last_name	varchar(50)
address_1	varchar(40)
address_2	varchar(40)
city	varchar(30)
state	varchar(20)
zip	varchar(10)
pin	varchar(4)
voice_callback	varchar(20)
fax_callback	varchar(20)
notification_method	varchar(20)
quote_balance	decimal(10,2)
group_number	int
ivr_trading	bit
pc_trading	bit
web_trading	bit
margin_agreement	bit
option_agreement	bit
touched	datetime
office_code	varchar(10)
password	varchar(10)
customer_type	varchar(40)
email	varchar(100)
reg_rep	varchar(10)
option_purchase	int
option_covered	int
administrator	int
cancel_flag	int
short_name	varchar(40)
admin_level	int
allow_place_trades	int
ivr_time	int
ssn	varchar(9)
scheme_name	varchar(20)
web_group	int
expiration_minutes	int
invalid_email	bit
AMEX_agreement	bit
AMEX_agreement_version	varchar(10)
AMEX_agreement_date	smalldatetime
OPRA_agreement	bit
OPRA_agreement_version	varchar(10)
OPRA_agreement_date	smalldatetime
NYSE_agreement	bit
NYSE_agreement_version	varbinary(10)
NYSE_agreement_date	smalldatetime
cookies_time	smalldatetime
statements_online	bit
proxy_delivery_status	tinyint
proxy_access_pin	varchar(4)
day_trader	bit

Figure 13h

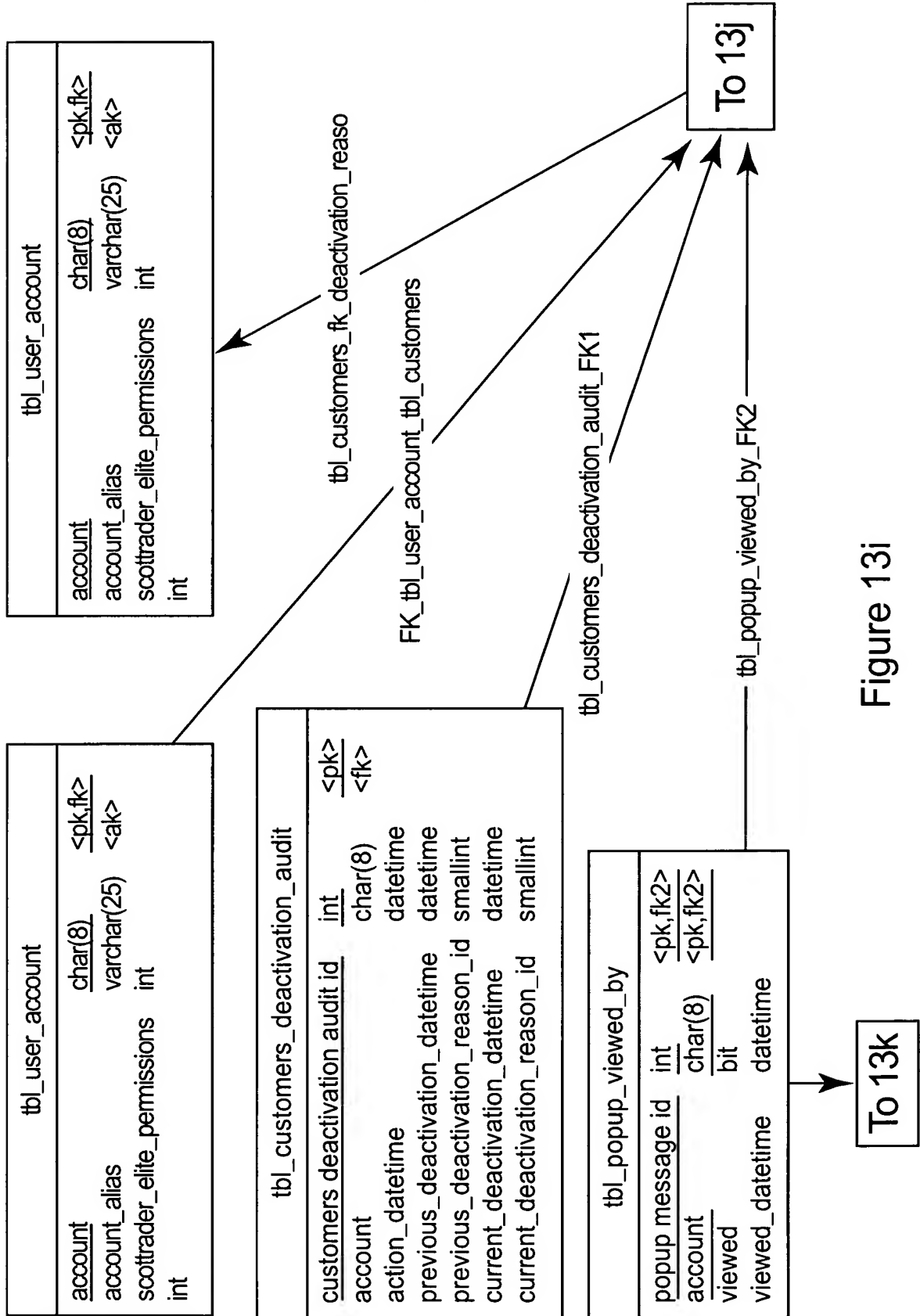


Figure 13i

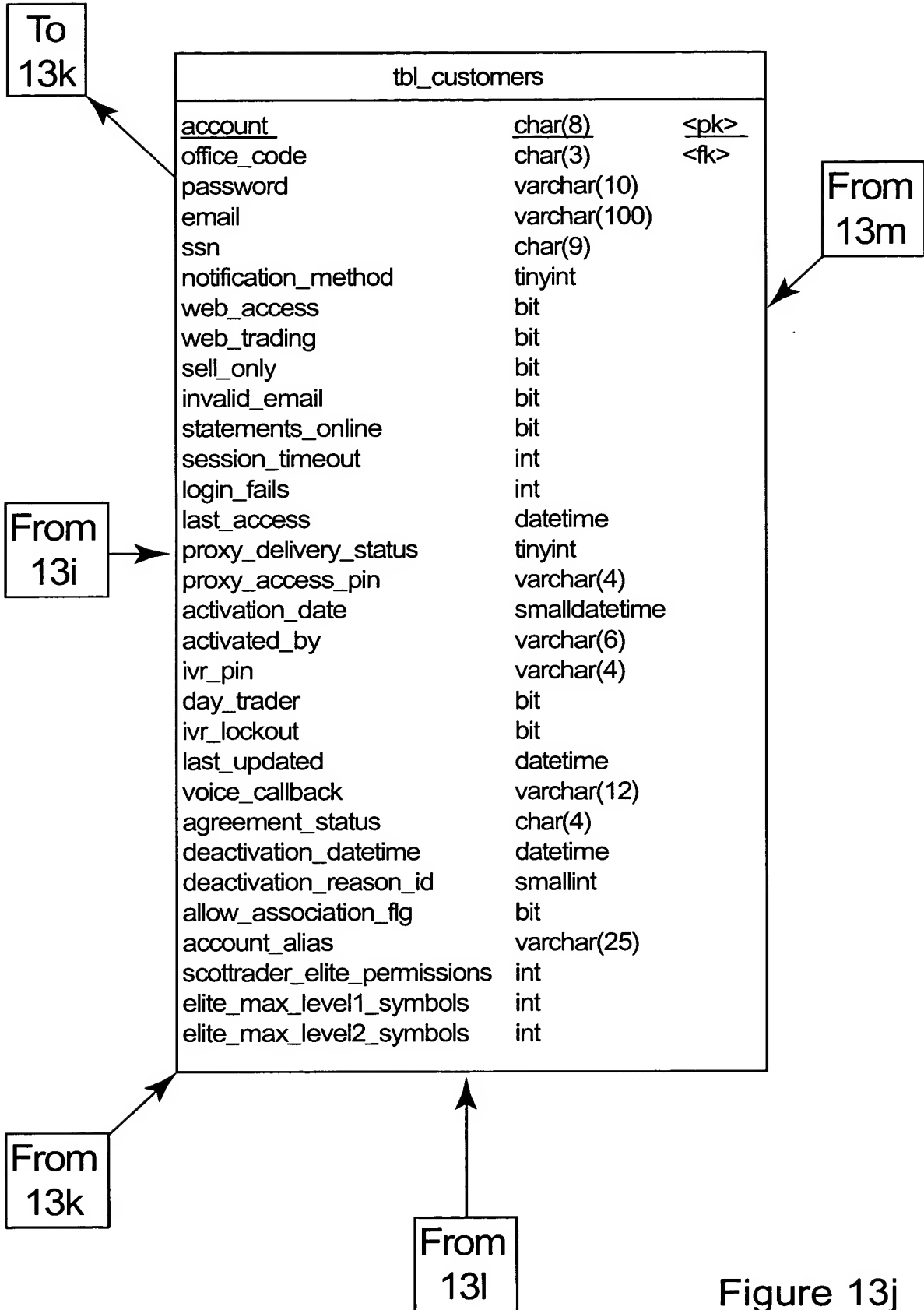


Figure 13j

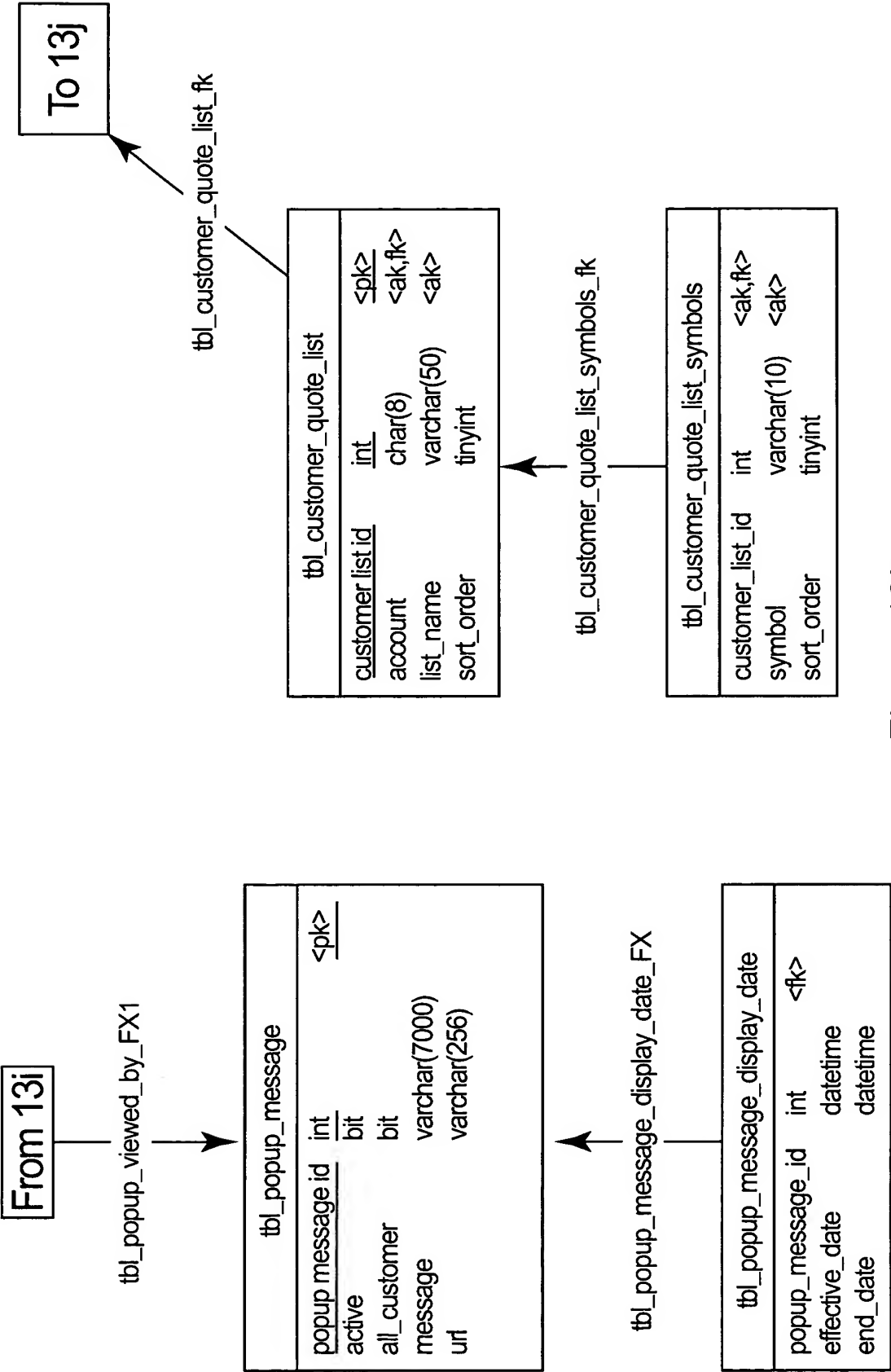


Figure 13k

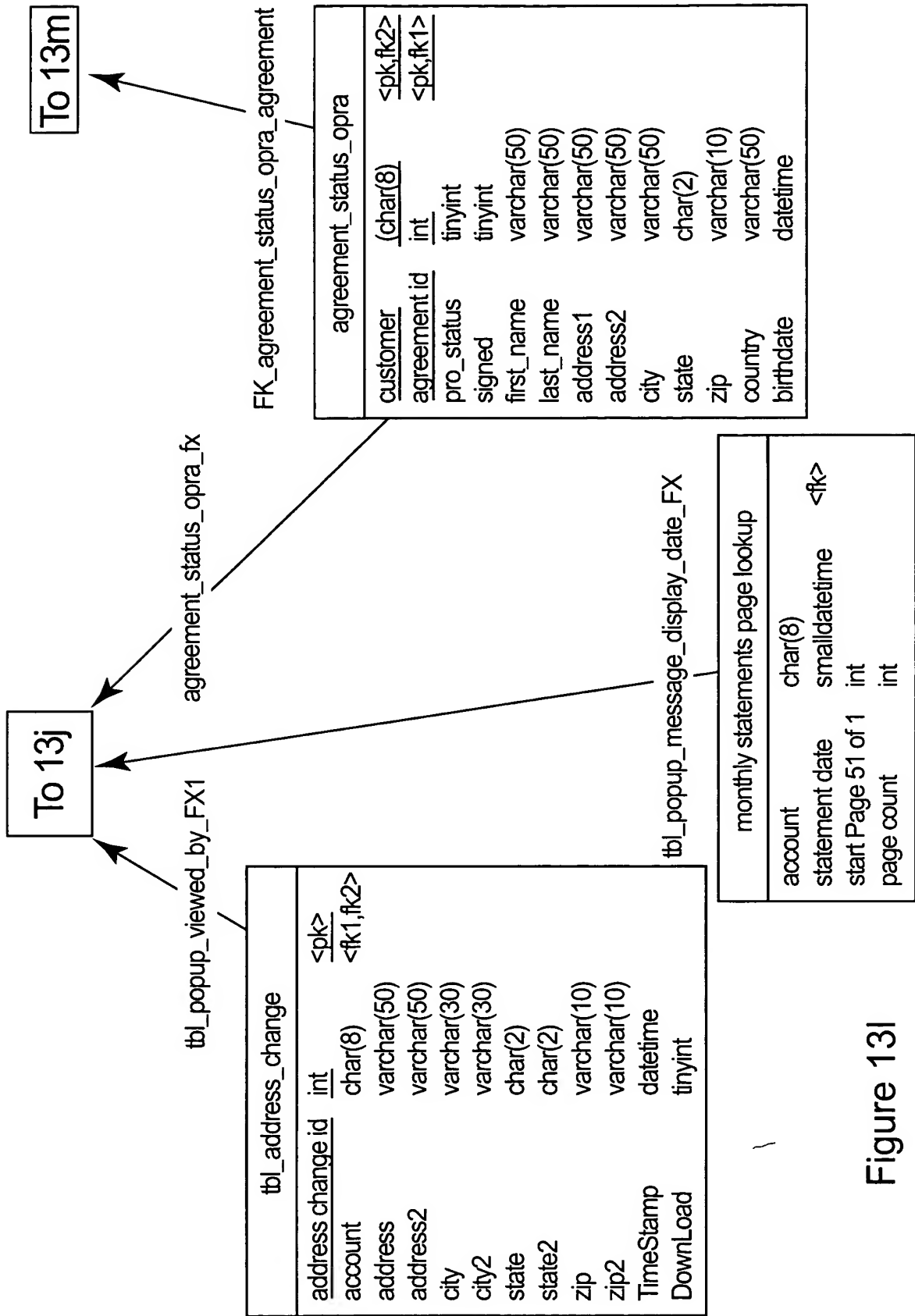


Figure 13l

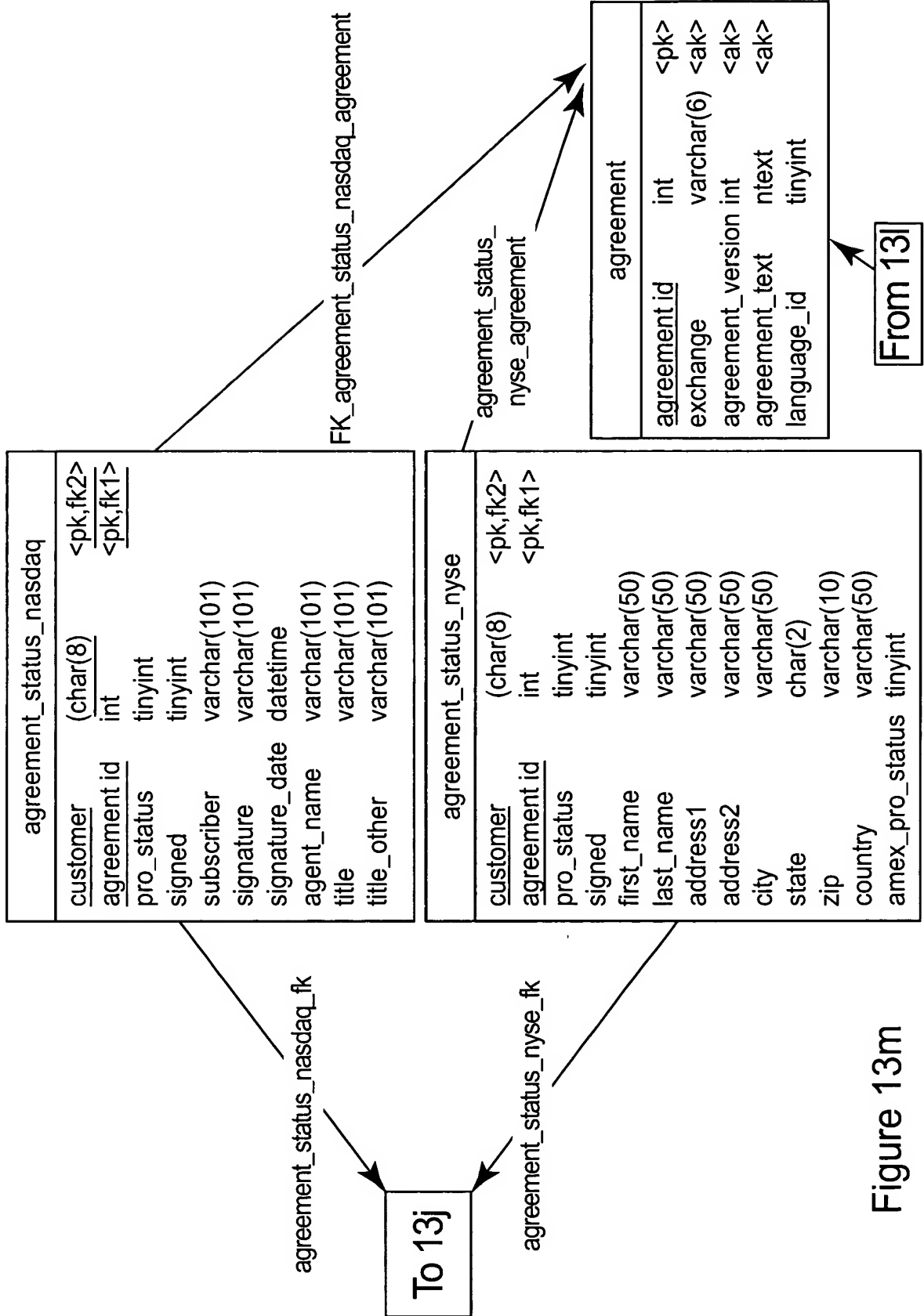
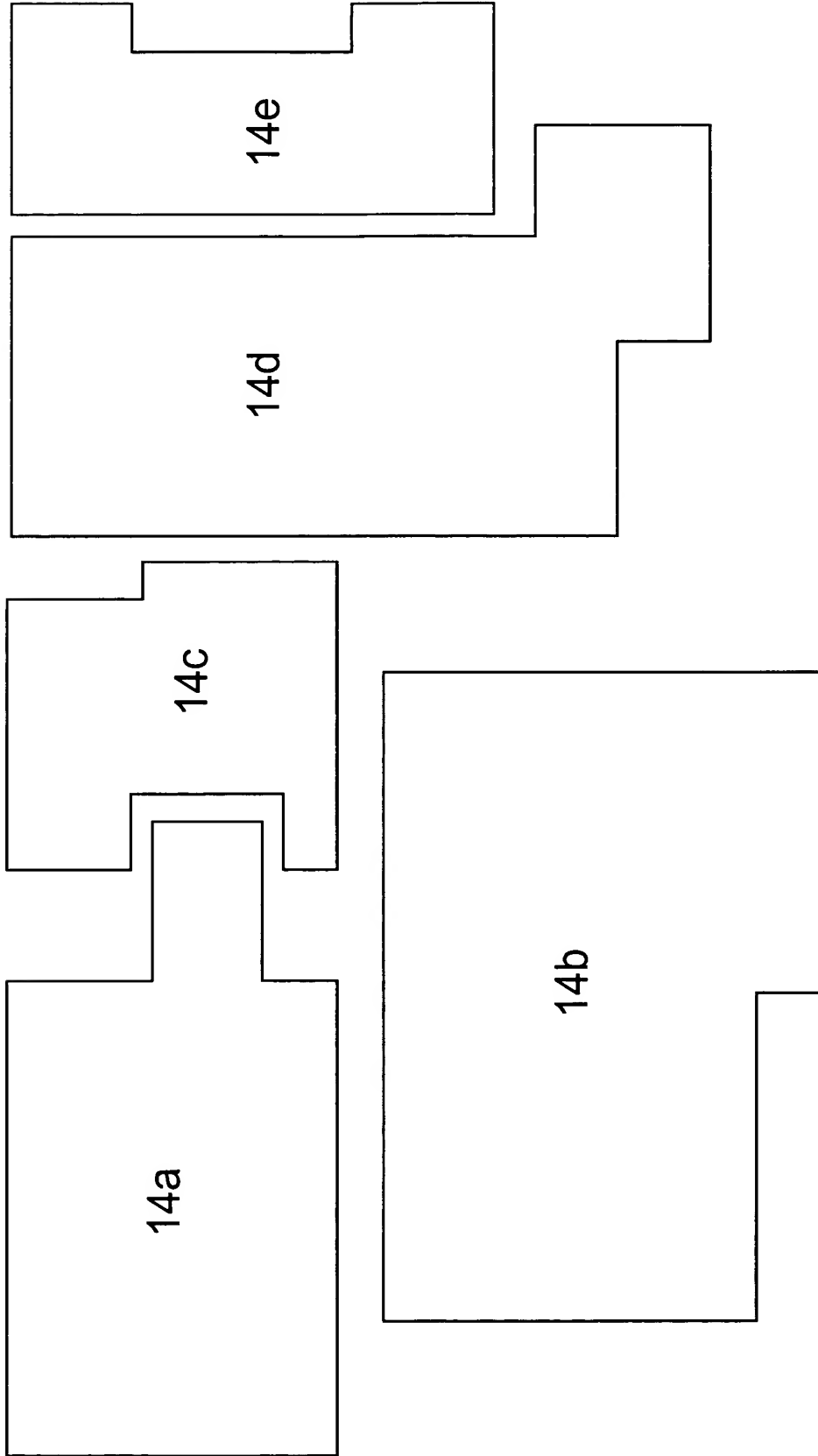


Figure 13m



Orders DB

Figure 14

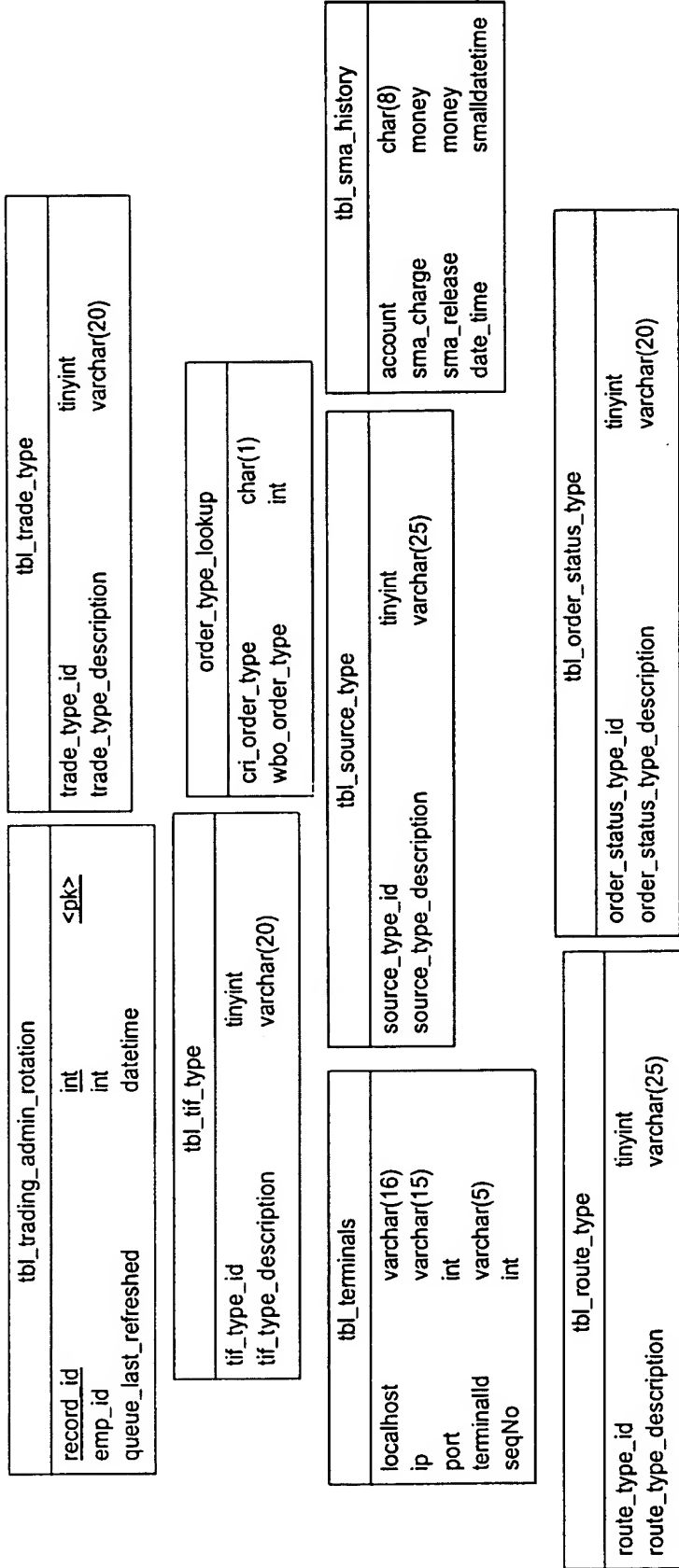


Figure 14a



To Figure 14(d) ← FK\_5tbl\_orders\_tbl\_action\_type

tbl_orders_audit		tbl_orders		
web_tracking_number	varchar(15)	web_tracking_number	char(15)	<pk>
reviewing_broker_id	int	fix_tracking_number	char(15)	
bid	money	orig_web_tracking_number	char(15)	
ask	money	account	char(8)	
net_equity	money	branch_code	char(3)	
amount	money	order_status	tinyint	
open_amount	money	route_type	tinyint	
open_shares	int	account_type	tinyint	
executions	money	order_type	tinyint	
free_cash	money	action_type	tinyint	
buying_power	money	symbol	varchar(12)	<fk>
fed_call	money	quantity	int	
trade_balance	money	quantity_filled	int	
market_value	money	price_type	tinyint	
entry_time	datetime	limit_price	money	
ip_address	varchar(16)	stop_price	money	
localhost	varchar(16)	tif_type	tinyint	
query_string	varchar(255)	trading_session_type	tinyint	
available_buying_power	money	exec_destination	varchar(12)	
positions_shares	int	commission	varchar(10)	
daytrader_execution_amount	money	dhr	bit	
		dni	bit	
		aon	bit	
		ob	bit	
		wi	bit	
		fok	bit	
		referral_program	bit	
		possible_duplicate	bit	
		solicited	bit	
		minimum_quantity	int	
		source_type	tinyint	
		entry_time	datetime	

Figure 14b

tbl_trade_history	
account	char(8)
account_type_id	int
action_id	int
symbol	varchar(30)
quantity	numeric(15,3)
price	numeric(15,3)
trade_date	smalldatetime
settled_date	smalldatetime
trade_number	int
commission	money
principal	money
tax	money
interest	money
fees	money
description	varchar(50)
last_modified	smalldatetime

tbl_order_results	
web_tracking_number	varchar(15)
result_type	tinyint
result_from_type	tinyint
message	varchar(500)
time_stamp	datetime

Figure 14c

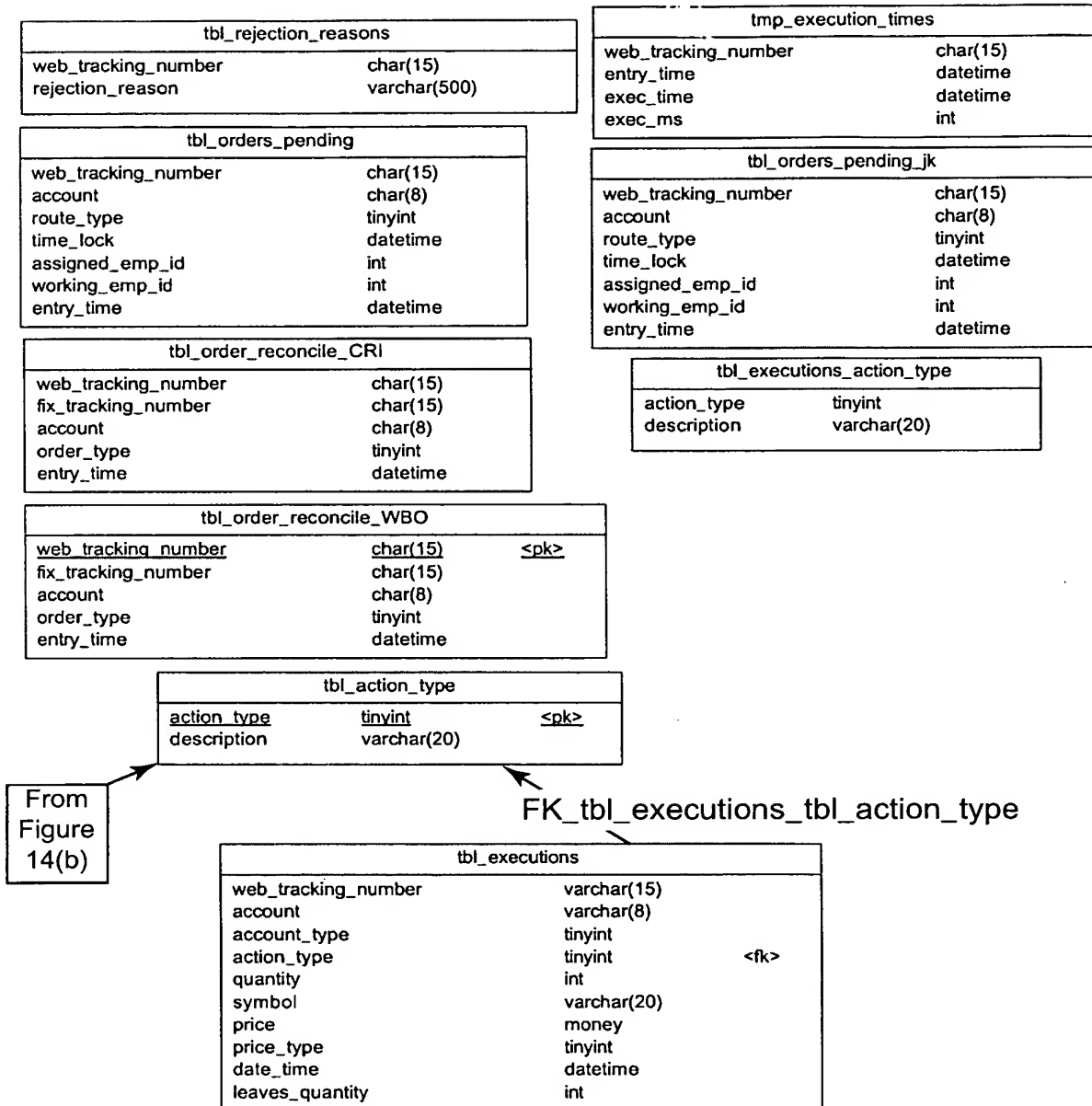


Figure 14d

tbl_trading_session_type	
trading_session_type_id	tinyint
trading_session_type_description	varchar(30)

tbl_orders_pending_dr	
web_tracking_number	varchar(15)
account	varchar(8)
route_type	tinyint
time_lock	datetime
locked	bit
assigned_emp_id	smallint
working_emp_id	smallint
entry_time	datetime

ordex_counts	
orders	int
executions	int
ivr_orders	int
ivr_executions	int
ivr_equities	int
ivr_options	int
rpt_date	datetime
executions_filled	int

account_type	
account_type_id	int
account_type_name	varchar(20)

Figure 14e

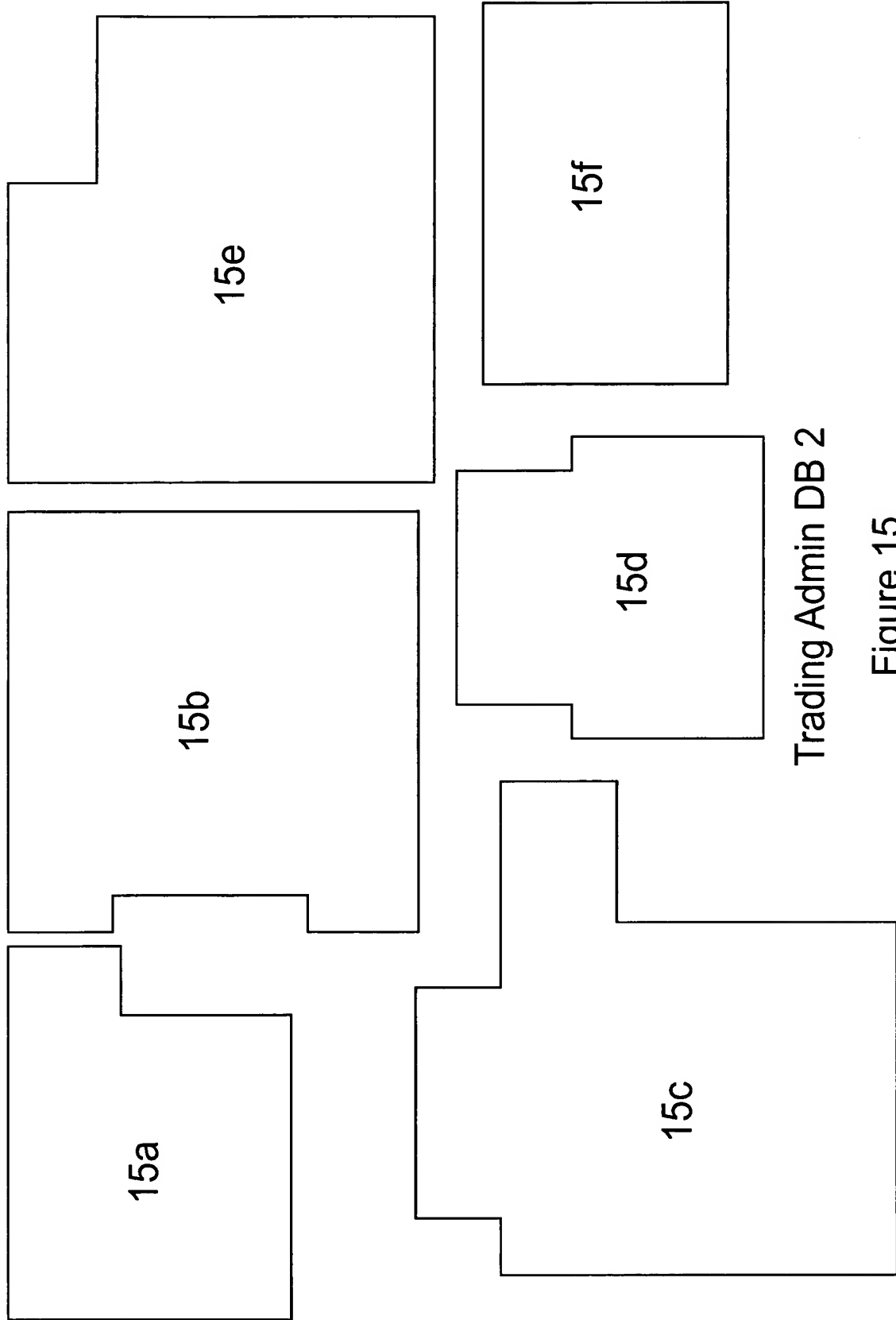


Figure 15

tbl_restrictions_audit		tbl_restrictions	
<u>restrictions_audit_id</u>	<u>int</u>	name	varchar(30)
name	varchar(30)	value	varchar(256)
audit_datetime	datetime	data_type	tinyint
previous_value	varchar(256)	date_changed	datetime
previous_date_changed	datetime	changed_by	varchar(30)
previous_change_by	varchar(30)		
new_value	varchar(256)		
new_date_changed	datetime		
new_change_by	varchar(30)		

tbl_fix_branches		tbl_daily_security_load_staging	
branch	char(3)	DataColumn	varchar(30)
remote_ip	varchar(15)		
remote_port	int		
local_hostname	varchar(20)		
heartbeat_int	int		
target_comp_id	varchar(6)		
sender_comp_id	varchar(6)		
fix_version	varchar(4)		
fix_port_type	int		
port_status	int		

tbl_daily_security_list	
cusip	char(9)
symbol	varchar(7)
margin_flag	bit
last_known_price	money

Figure 15a

tbl_notification_method_type	
notification_method_type_id	tinyint
notification_method_type_description	varchar(25)

tbl_negative_quantities	
<u>negative_quantities_id</u>	<u>int</u>
account	char(8)
office_code	char(3)
message	varchar(50)
acknowledge	tinyint
date_time	smalldatetime

security_update_from_SQL1	
symbol	varchar(9)
route	tinyint
trade_during_extended_hours	bit
option_chain_disallowed	bit
margin_requirement_percent	tinyint
trading_action_bitmask	tinyint

tbl_short_archive	
<u>shorts_archive_id</u>	<u>int</u>
cusip	char(10)
description	varchar(60)
symbol	varchar(10)
total_shares_available_for_short	int
processed_date	smalldatetime

Figure 15b

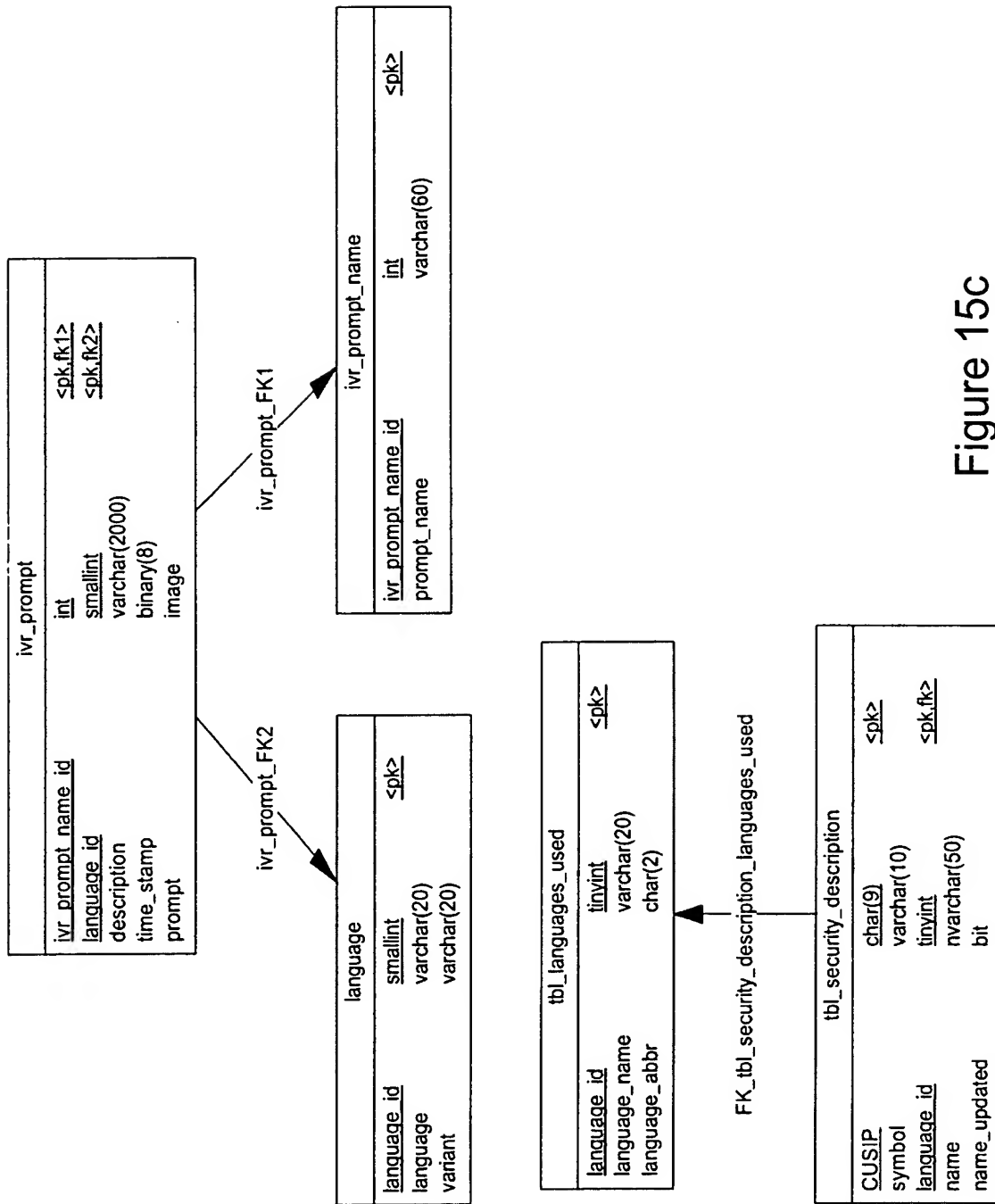


Figure 15c



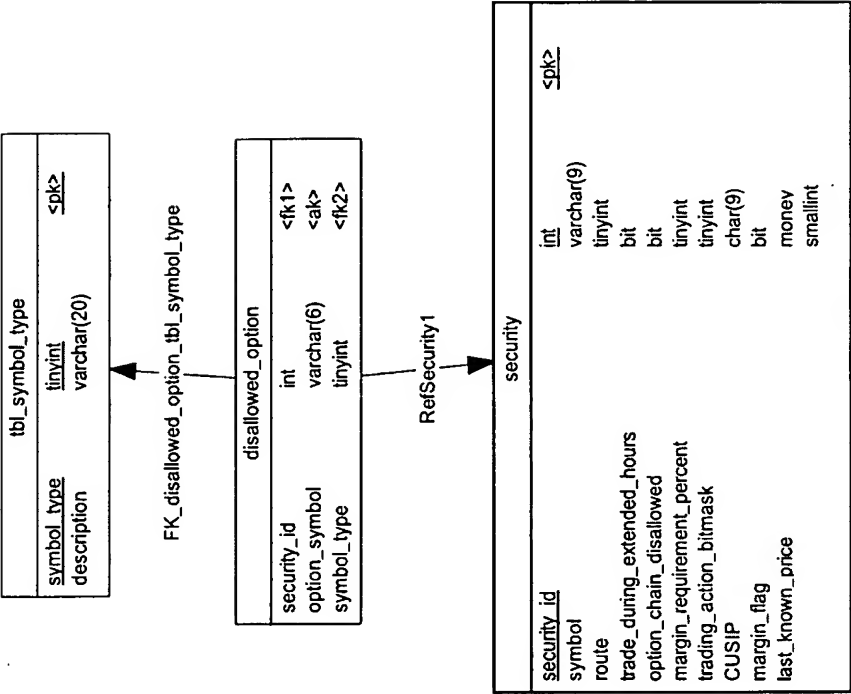


Figure 15d

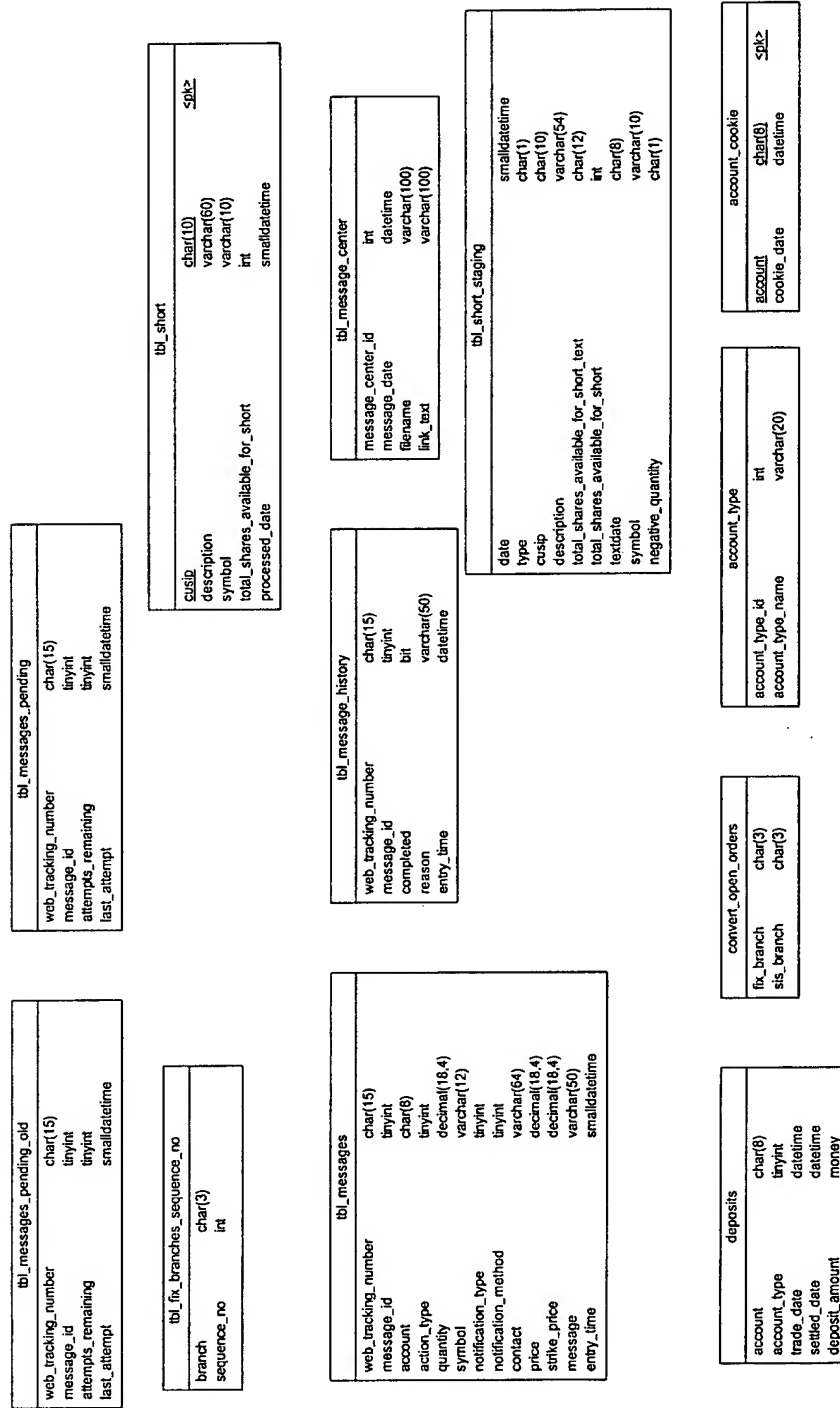


Figure 15e

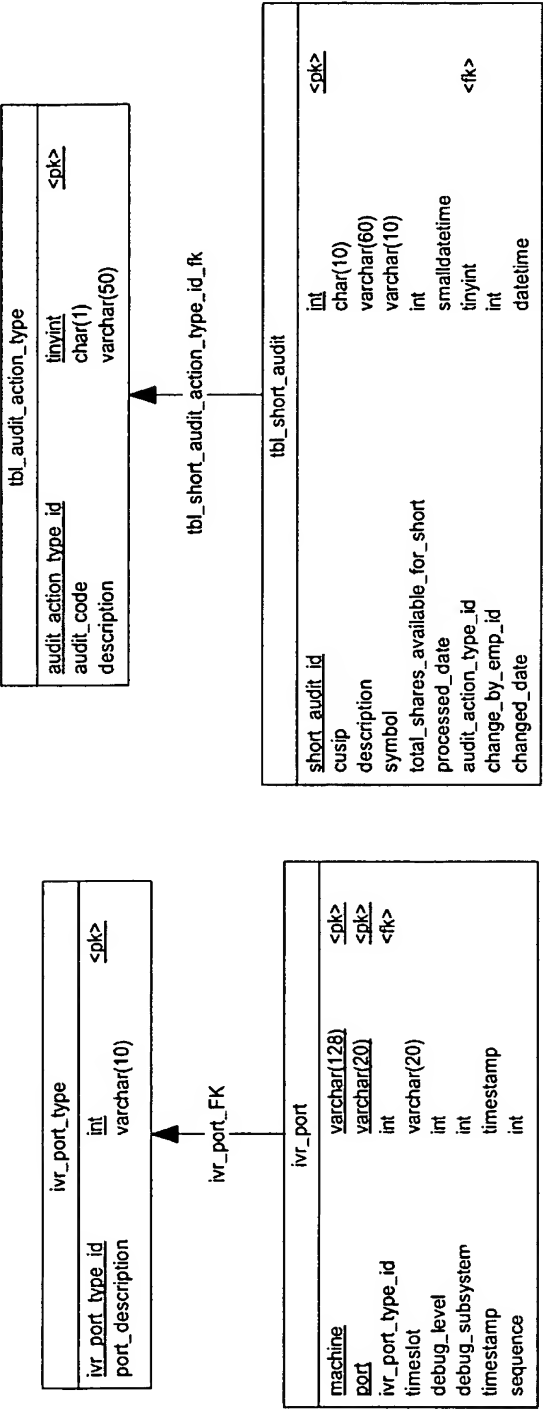


Figure 15f

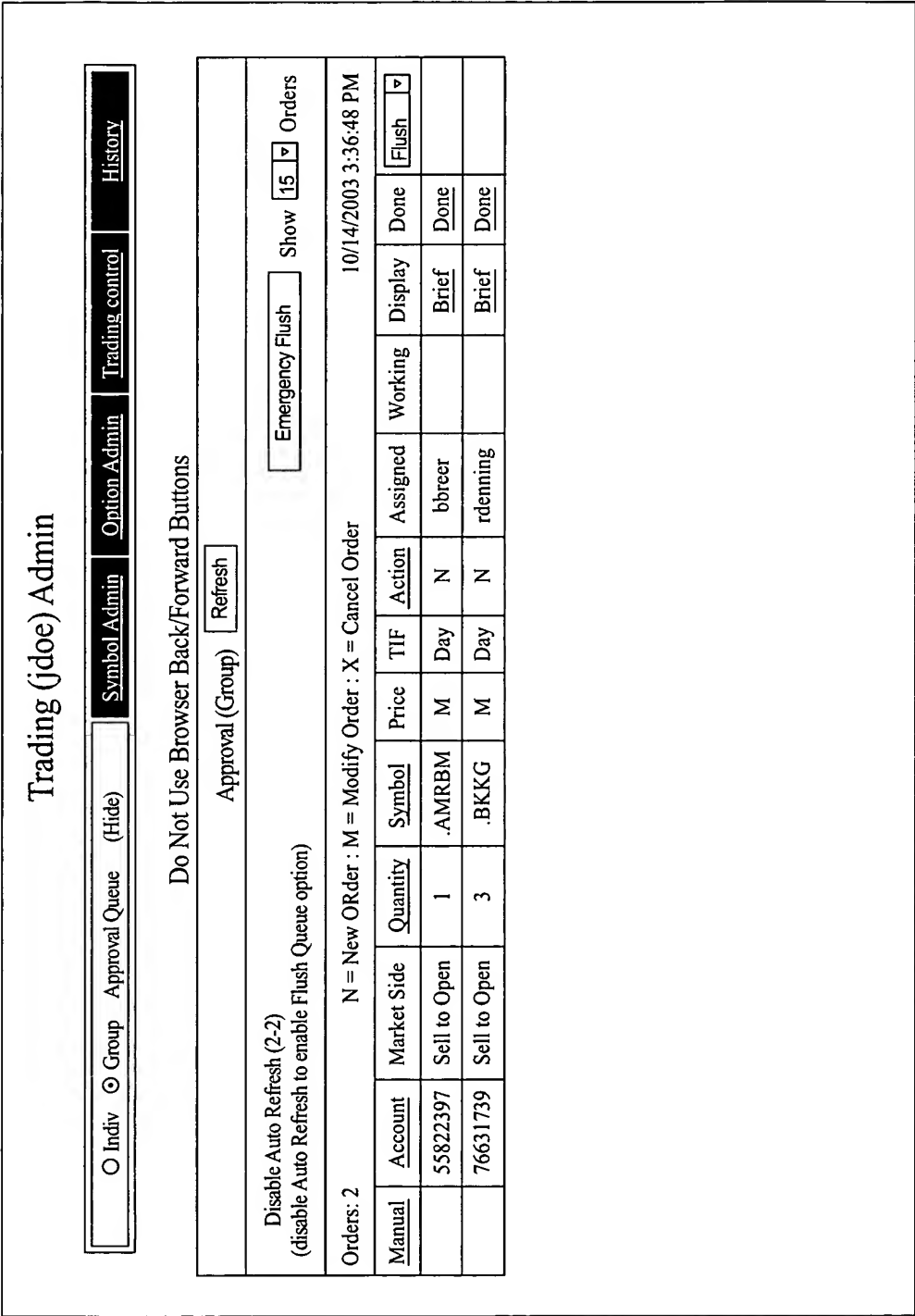


Figure 16a

### Do Not Use Browser Back/Forward Buttons

Reason Selection:

Reason Text:

Order Approval

Approve

Reject

Done

Cancel Edit

	Margin Buying Power	Trading Cash
1,200.00	38,652.00	-346,064.21

Account	Status	Route	Order	Action	Quantity	Symbol	Price	TIF	AON	Account Type	Trading Session	Possible Duplicate	Entry Time	Web Tracking Number	Branch
Orig 123xyz	Pending Modify	Fix	New	Sell to Open	120	.QQQJ	L015	Day	Yes	Margin	Regular	No	10/14/2003 3:40:27 PM	XQA240320031014-Orig	10D
Mod 123xyz	Sent	Approval	Modify	Sell to Open	120	.QQQJ	L01	Day	Yes	Margin	9	No	10/14/2003 3:41:54 PM	PS8815920031014	10D

Results

Web Tracking Number	Result Type	Result From Type	Message	Time Stamp
PS8815920031014	Re-route	Rules	Option Sell Call to Open	10/14/2003 3:41:54 PM

.QQQJ Quote

Market	Last	Change	Size	Bid	Ask	B/A Size	High	Low	Volume	UPC1830	Halted	Fast Market
CBOE	+0.10	-0.05	10	-0.05	0.15	24134 x 31964	0.10	0.05	7,323	No	No	No

Figure 16b

53 / 62

Figure 16c

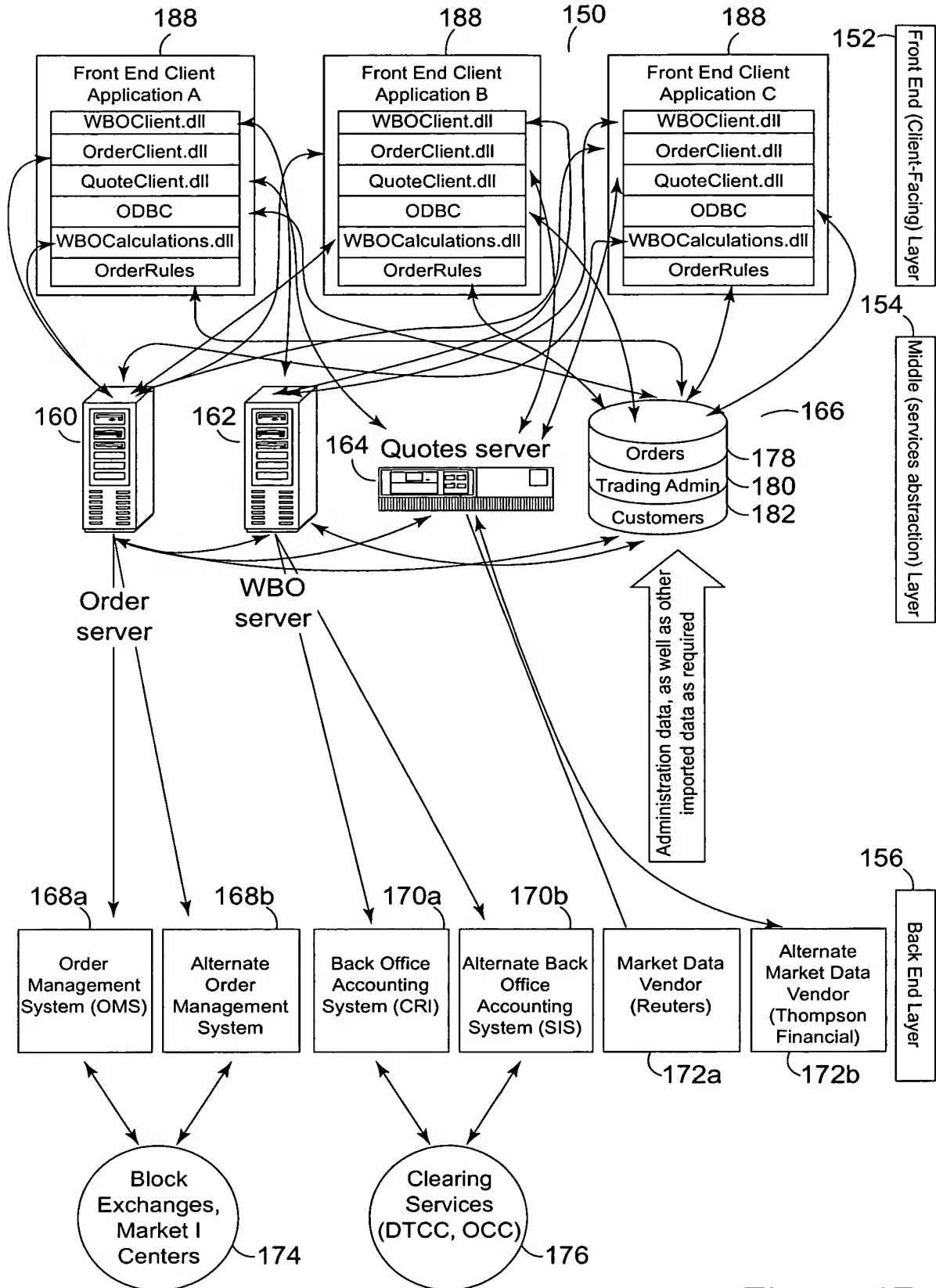


Figure 17

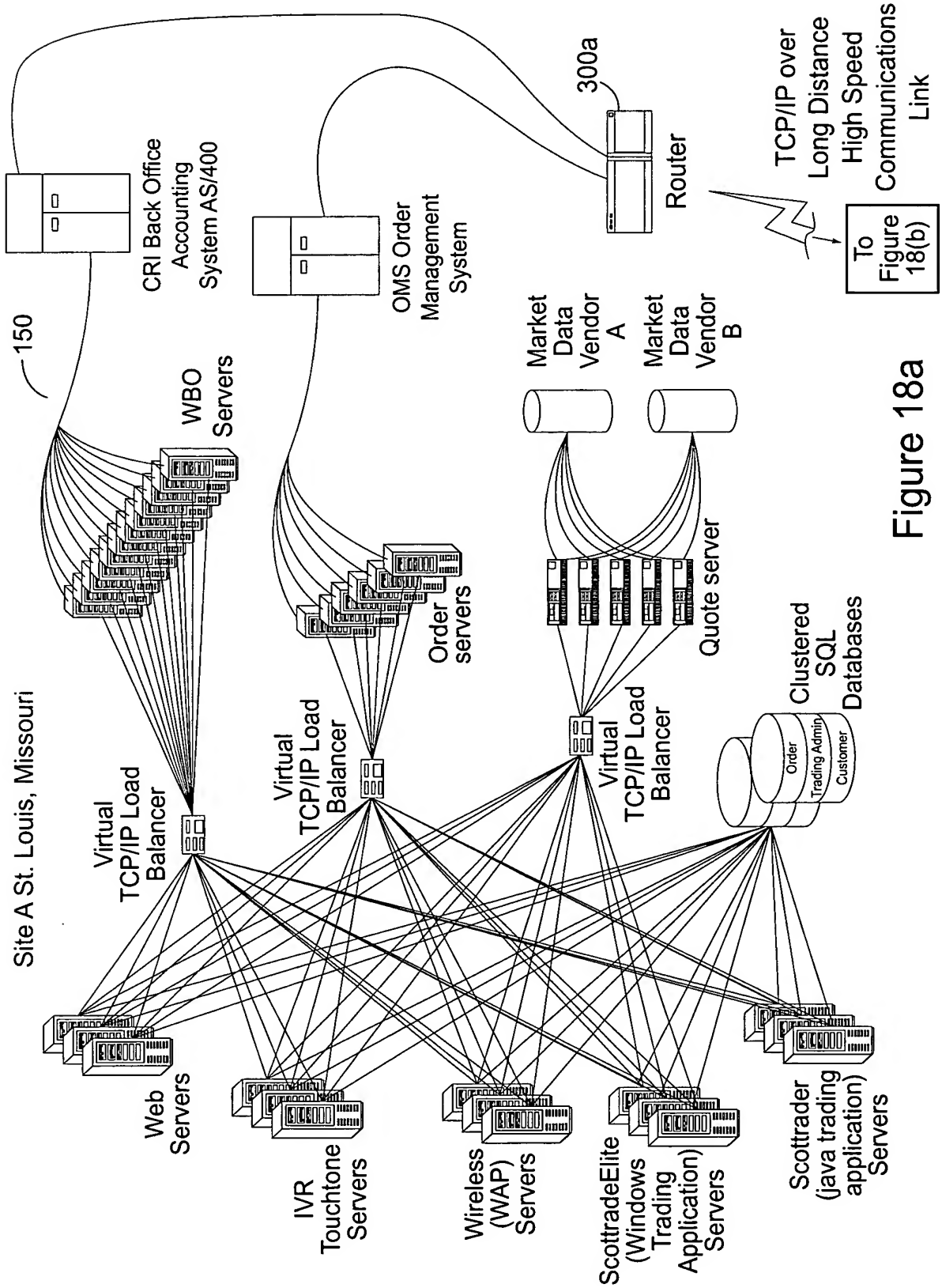


Figure 18a



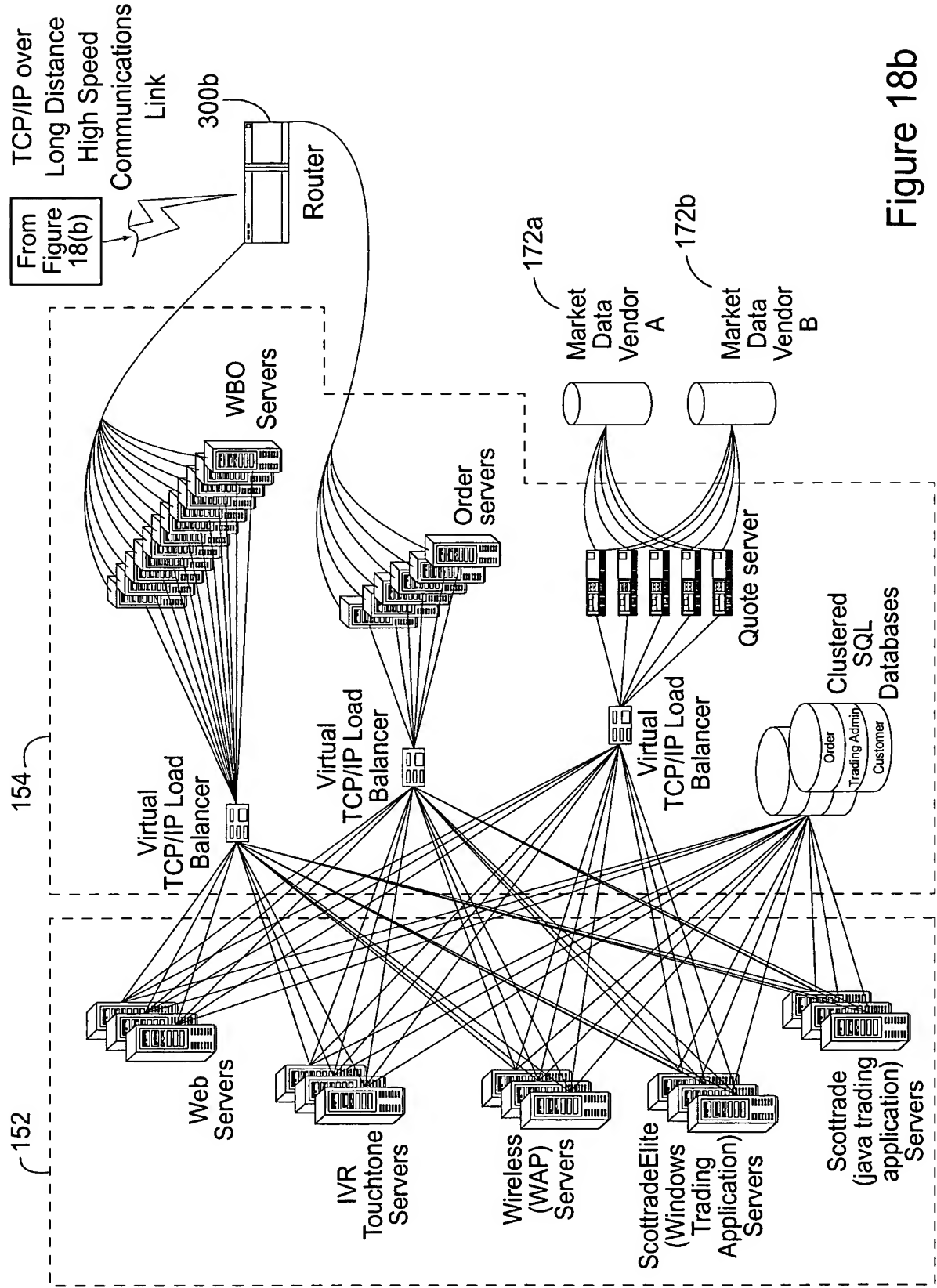


Figure 18b

Title: System And Method For The Automated Brokerage  
Of Financial Instruments

Inventor(s): Tully et al.

Appl. No. 10/692,067

Docket # 36194/42366

57 / 62

Quote Server	
Setup View Dump Outstanding Requests	
<b>Sources</b> Quote Source: ATFI Level 2 Source: None Fundamentals Source: ATFI News Source: None History Source: ATFI	<b>Stream Connections</b> Connections: 0 Update P/S: 0.00 Symbols: 0
<b>Cache</b> Cache Size: 0 Historical Cache Size: 0 Cache Hits: 0% Historical Cache Hits: 0%	<b>Threads</b> Request Handler Idle Time: 100% Update Handler Idle Time: 34% Stream Handler Idle Time: 23% History Updater Idle Time: 100% ATFI Request Handler Idle: 100%
<b>Updates</b> Tick: 163266 Quote: 1200179 Movers: 1580 Level 2: 0 Refresh: 24256 News Static Equity: 540654 Options: 816789 Index: 30175 Mutual Fund: 0 Money Market: 0 Fixed Income: 0 Bonds: 84 Other: 1580 Updates Per Second: 4070.00	<b>I / O</b> Incoming Bytes: 0.0 kb Outgoing Bytes: 0.0 kb Average Response Size: 56 bytes Average Time: 0 ms
	<b>Server</b> CPU: 22% Available Memory: 84 mb Connections: 10 Outstanding Requests: 0 Total Requests: 50 Historical Requests: 0 Round Trips: 0 Requests Per Second: 0.00
	<b>Unhandled Updates</b> Cache Updates: 115 Stream Updates: 31 Historic Updates: 0

Figure 19a

Title: System And Method For The Automated Brokerage  
Of Financial Instruments  
Inventor(s): Tully et al.  
Appl. No. 10/692,067  
Docket # 36194/42366

58 / 62

Configure

Quote Source:   ☒ Cache ☒ Cache Movers

Level2 Source:

Fundamentals Source:

News Source:

History Source:   ☒ Cache

General

Request Handler Threads:

Update Handler Threads:

Stream Update Threads:

History Update Threads:

Security Cache Expiration:  Option Chain Expiration:

Movers Cache Expiration:  Company Data Expiration:

ATFI

Ip:   MDS Connections:

Request Handler Threads:    DBM Connections:

General

Socket Source:

Max connections:

General

Ip:

Figure 19b

Configure

Quote Source:  Restart ☒ Cache ☒ Cache Movers

Level2 Source:  Restart

Fundamentals Source:  Restart  
 Restart  
 Restart  
News Source:

History Source:  Restart ☒ Cache

General

Request Handler Threads:  + -

Update Handler Threads:  + -

Stream Update Threads:  + -

History Update Threads:  + -

Security Cache Expiration:  Option Chain Expiration:

Movers Cache Expiration:  Company Data Expiration:

ATFI

Ip:  Apply MDS Connections:

Request Handler Threads:  + - DBM Connections:  +

General

Socket Source:  Stop Restart

Max connections:  Drop All

General

Ip:

OK Cancel

Figure 19c

Title: System And Method For The Automated Brokerage  
Of Financial Instruments  
Inventor(s): Tully et al.  
Appl. No. 10/692,067  
Docket # 36194/42366

60 / 62

Configure

Quote Source:  Restart ☒ Cache ☒ Cache Movers

Level2 Source:  Restart

Fundamentals Source:  Restart

News Source:  Restart

History Source:  Restart ☒ Cache

General

Request Handler Threads:  + -

Update Handler Threads:  + -

Stream Update Threads:  + -

History Update Threads:  + -

Security Cache Expiration:  Option Chain Expiration:

Movers Cache Expiration:  Company Data Expiration:

ATFI

Ip:  Apply MDS Connections:

Request Handler Threads:  + - DBM Connections:  +

General

Socket Source:  Stop Restart

Max connections:  Drop All

General

Ip:

OK Cancel

Figure 19d

Configure

Quote Source:  Restart ☒ Cache ☒ Cache Movers

Level2 Source:  Restart

Fundamentals Source:  Restart

News Source:  Restart

History Source:  Restart ☒ Cache

General

Request Handler Threads:  + -

Update Handler Threads:  + -

Stream Update Threads:  + -

History Update Threads:  + -

Security Cache Expiration:  Option Chain Expiration:

Movers Cache Expiration:  Company Data Expiration:

ATFI

Ip:  Apply MDS Connections:

Request Handler Threads:  + - DBM Connections:  +

General

Socket Source:  Stop Restart

Max connections:  Drop All

General

Ip:

OK Cancel

Figure 19e

Title: System And Method For The Automated Brokerage  
Of Financial Instruments  
Inventor(s): Tully et al.  
Appl. No. 10/692,067  
Docket # 36194/42366

62 / 62

Configure

Quote Source:  Restart ☒ Cache ☒ Cache Movers

Level2 Source:  Restart

Fundamentals Source:  Restart

News Source:  Restart

History Source:  Restart ☒ Cache

General

Request Handler Threads:   + -

Update Handler Threads:  + -

Stream Update Threads:  + -

History Update Threads:  + -

Security Cache Expiration:  Option Chain Expiration:

Movers Cache Expiration:  Company Data Expiration:

ATFI

Ip:  Apply MDS Connections:

Request Handler Threads:  + - DBM Connections:  +

General

Socket Source:  Stop Restart

Max connections:  Drop All

General

Ip:

OK Cancel

Figure 19f